

SIEMENS

ARCADIS Avantic

SP

Configuration

System

Configuration

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Overview

Abbreviation	Meaning
ACR-NEMA	American College of Radiology - National Electrical Manufacturers Association
BIOS	Basic Input Output System, lowest level of PC configuration
AET	Application Entity Title - name of the DICOM service that communicates either as the user (SCU) or the provider (SCP).
CD	Compact Disc
CDR	Compact Disc Recordable
CSE	Customer Service Engineer
DICOM	Digital Image Communication in Medicine (ACR-NEMA standard)
DHCP	Dynamic Host Configuration Protocol - procedure for assigning numeric IP addresses to nodes, in which blocks of addresses are leased to clients on a first-come, first-served basis. Typically, DHCP is combined with WINS so an IP address is both dynamically assigned and automatically associated with a domain name. This can be combined with DNS, resulting in a dynamically assigned numeric IP address that is automatically associated with both NetBIOS and Internet names.
DNS	Domain Name Services - used for address parsing with numeric IP addresses being linked to names in the Internet format.
FTP	File Transfer Protocol - a client-server application that transfers files from one computer to another.
Gateway	Controls data traffic between two networks above the network layer.
HIS	Hospital Information System
LAN	Local Area Network (in this case: always Ethernet)
LMHOSTS	Address parsing method in which numeric IP addresses are statically linked to NetBIOS names. The LMHOSTS file is checked to determine whether the name is addressed.
MOD	Magneto-Optical Disk
NetBIOS	Network Basic Input Output System - contains various network services and program interfaces. NetBIOS services run on protocols such as TCP/IP.

Definitions and Abbreviations

7

NIC	Network Interface Card - an expansion card that provides a physical connection to the network.
OI	Operating Instructions
PB	Patient Browser
PPP	Point-to-Point Protocol - data connection and network protocol for serial connections (such as dial-up modems).
RAS	Remote Access Services - a Windows NT service that supports dial-in and dial-out connections using modems and ISDN.
RIS	Radiology Information System
Router	A multi-port computer or a dedicated hardware component that examines network layer addresses for data packets and sends them to a different network as appropriate.
SCU	Service Class User
SCP	Service Class Provider
TCP/IP	Transport Control Protocol/Internet Protocol - the standard protocol for networks.
UI	User Interface
USC	Uptime Service Center
URL	Uniform Resource Locator
VPN	Virtual Private Network
WINS	Windows Internet Name Service - used for address parsing with IP addresses being linked dynamically to NetBIOS names. DNS can be combined with WINS.
WIP	Work in Progress

General Information

NOTE

- Steps to be performed are preceded by a bullet point.
 - Indented text under the activity to be performed contains general information.
 - ⇒ Results and events are preceded by an arrow.

NOTE

Depending on the progress of the configuration, the "Next" button can also be displayed as the "Finish" button.

NOTE

Once the "Save" button has been selected in the individual screens, the message "..... successfully saved" appears following a successful save. Please:



- Select "OK".

NOTE

Should problems arise when making changes in the Service UI, attempt to resolve them first by powering the system completely off and then powering it on again.

Reboot, restart, and shutdown

NOTE

To activate changes in the system, a "shutdown" must always be performed, i.e., the complete system must be switched off and switched back on again.

A shutdown must always be performed when configuration is complete.

If one of the following messages appears, proceed as described in the note.

NOTE

Restart



Reboot



- If one of the above windows is displayed, click on "OK".

Reboot



- If this window is displayed, click on "OK".
- Click on "Home".

Country-specific keyboard layout and user interface

- Select "Configuration" under "Options" on the task card.
- Double-click "Regional and Language Options".
- Select "Regional Options".
- Select the language under "Standards and formats".
 - The following languages can be selected: German (Germany), French (France), Spanish (Spain) and English (United States).
- Select "Languages".
- Click "Detail".
 - This is where the keyboard language is set.
- Under "Installed services", select the "Add" button.
 - ⇒ The following is displayed: "Add input language".
- Select the desired language.
 - The following languages can be selected: German (Germany) and English (United States).
- Click "OK".
 - ⇒ The keyboard language is displayed.
- Under "Default input language", select the desired language from the drop-down menu.
- Click "OK".
- Click "OK".
 - ⇒ The following is displayed:
The regional settings have been changed.
Therefore a restart of the application is necessary.
Do you want to restart the application now?
- Click "OK".
 - This will apply the settings.

Image Text Editor

- Select "Options" on the task card.
- Select "Configuration".
- Double-click "Image text editor".
- Under "View name", select "XAlImage".
- Click "v" to deselect "Software version".
- Click "Apply".
- Under "View name", select "ARCADISAcqView".
- Click "Customized text".
- Click "v" to deselect "Scale bar".
- Click "v" to deselect "Orientation labels".

- Click "v" to deselect "Image date".
- Click "v" to deselect "Image time".
- Click "v" to deselect "Image number".
- Click "Apply".
- Click "OK".
- Close the "Configuration Panel".

Service Software

Open the service software

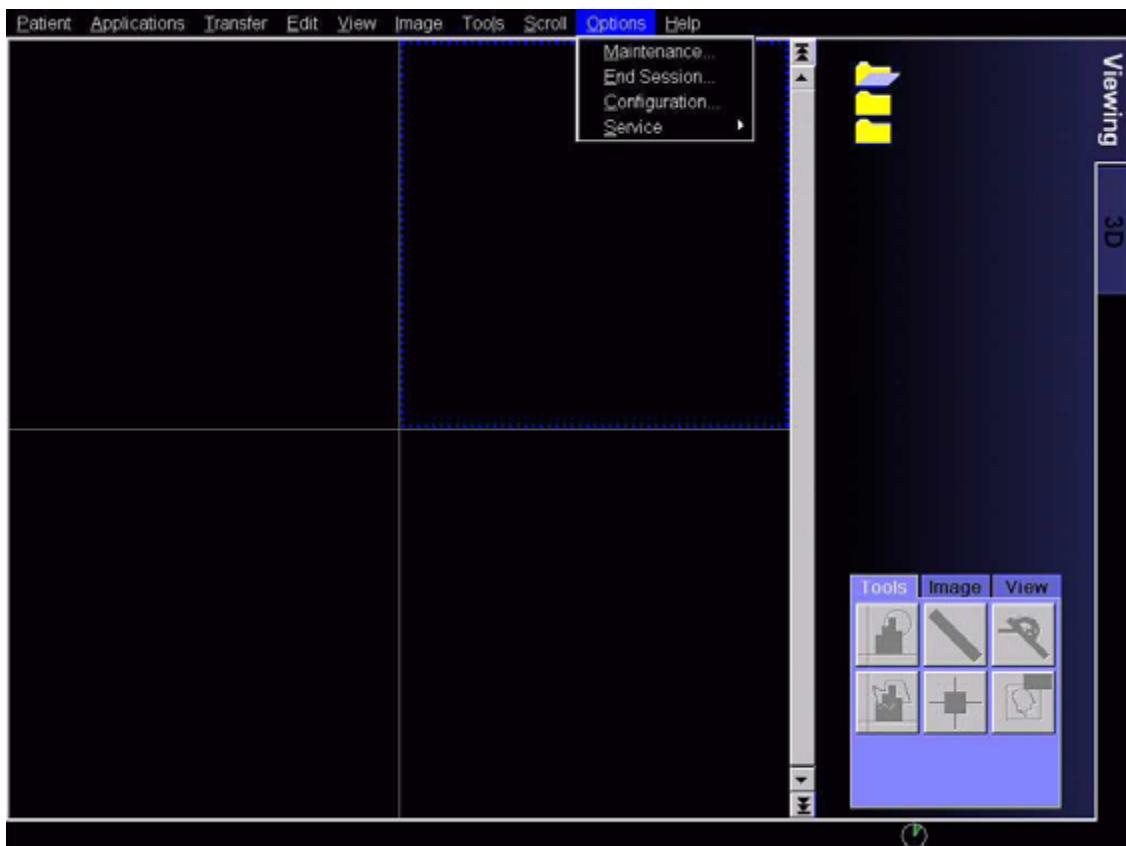


Fig. 1: C06_5_01

- Under Options, select "Service".

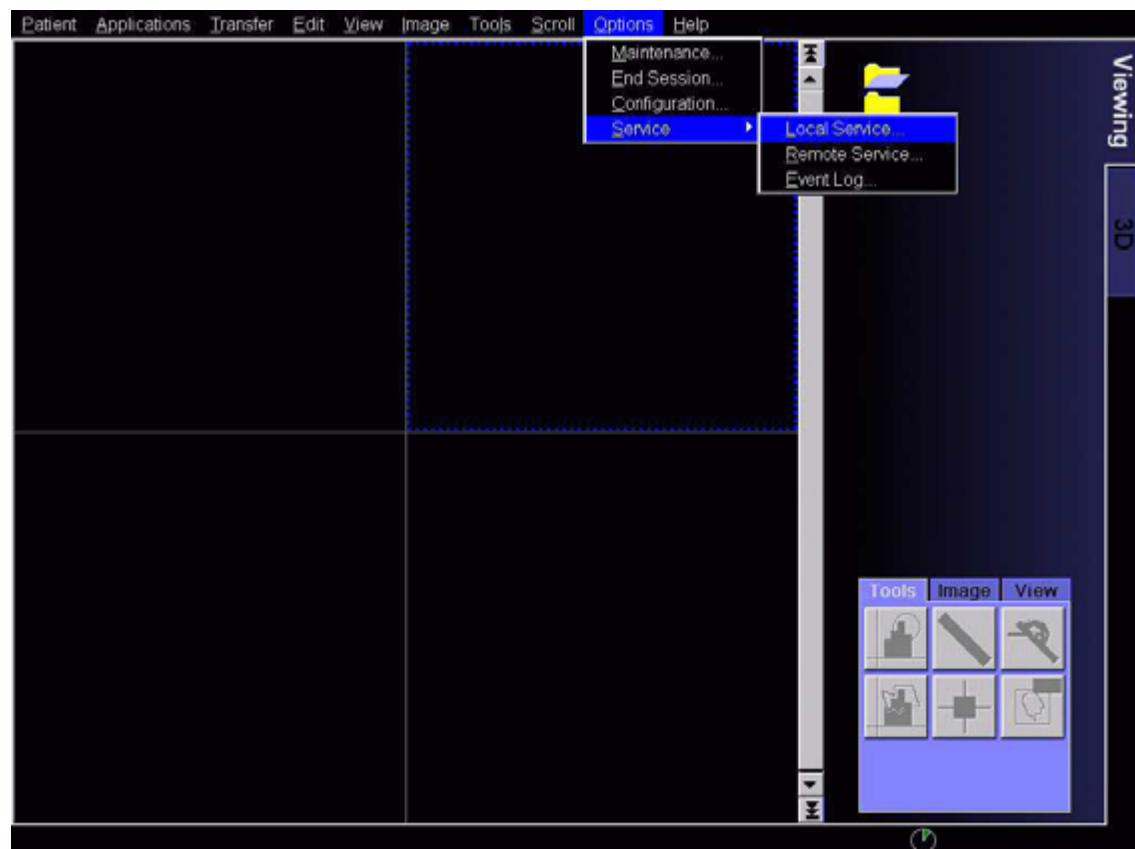


Fig. 2: C06_5_02

- Select "Local service".

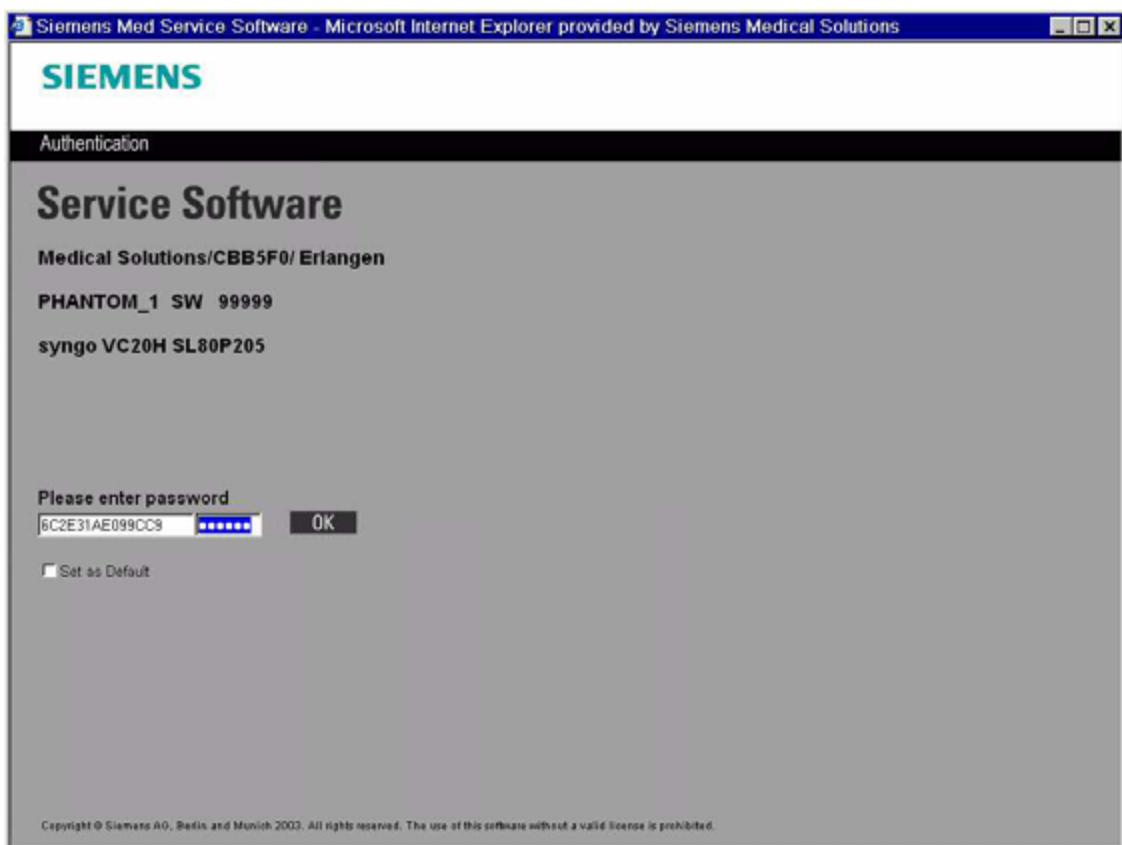


Fig. 3: C06_5_03

- Enter the service key under "Please enter password".
- Select "Set as default".
- Click "OK".
 - The service home menu is displayed.



Fig. 4: Home Menu

Configuration

- Select "Configuration".

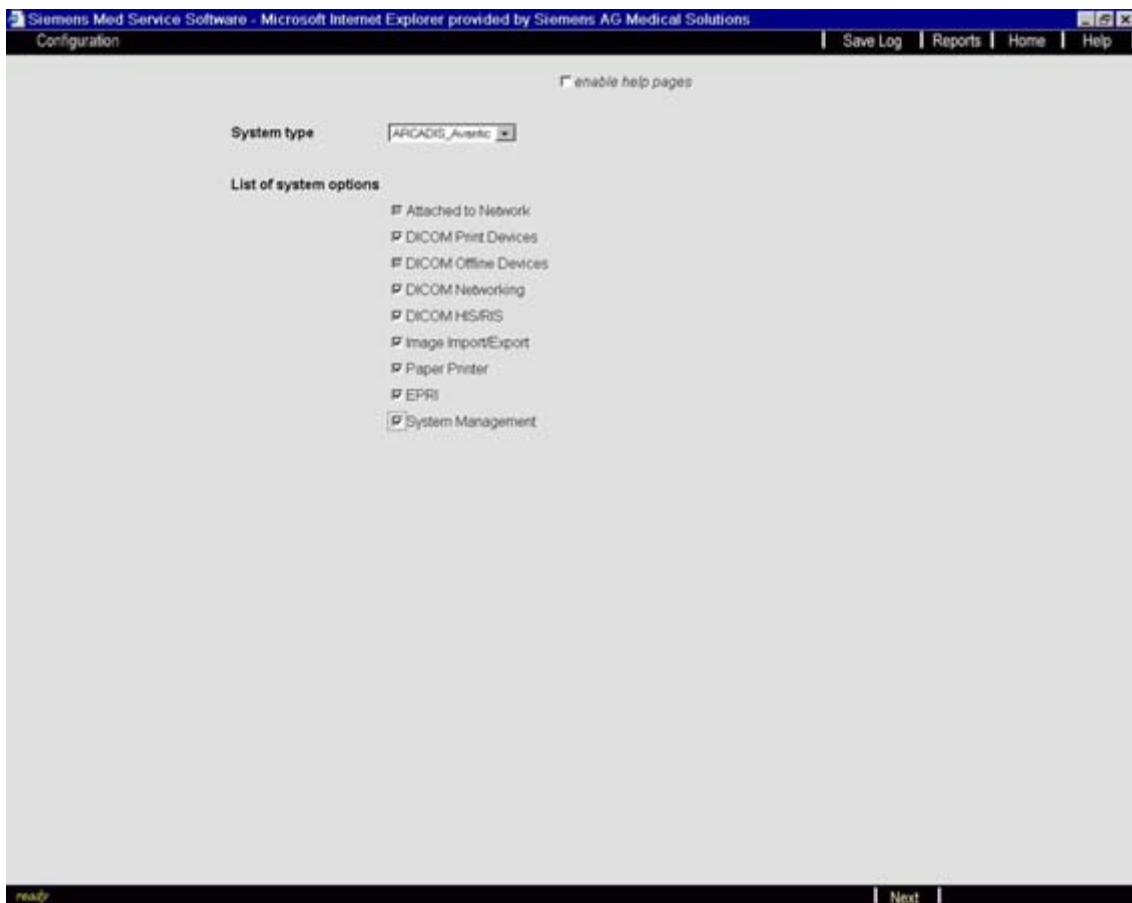


Fig. 5: Configuration

System type	Select ARCADIS Avantic
-------------	------------------------

The following system options can be selected.

Attached to network	TCP/IP LAN (local network) for local system
DICOM print devices	DICOM basic print service for laser cameras
DICOM offline devices	DICOM media storage on offline media such as MOD and CD-R
DICOM networking	DICOM storage and query/retrieve to remote network nodes
DICOM HIS/RIS	DICOM Basic Worklist for radiology (hospital) info. systems
Image import/export	Import/export of DICOM images from/to the file system
Paper printer	Format for local printers (LPT1 or USB)
EPRI	Electronic Patient Record Interface

System management	System Management Agent
Enable help pages	Help pages are displayed between the configuration masks.

- Select the configured system options.

NOTE

System management has not been released for ARCADIS Avantic.

- Click "Next".

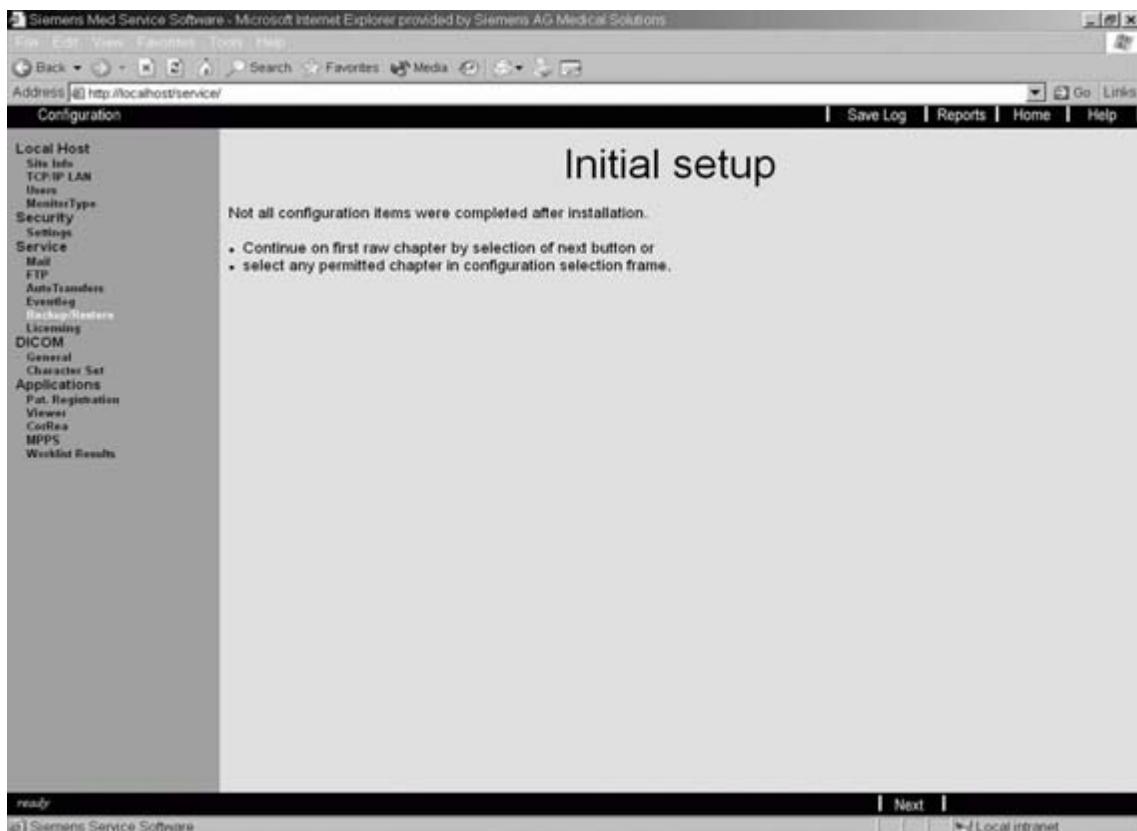


Fig. 6: *Service >> Backup/Restore (Inst)*

- Click "Next".

Local Host

Site info. 1

- Select "Site info.".

The screenshot shows the Siemens Med Service Software interface. The main window displays the following information:

System		Customer and Address	
Material No.	10047680	Name	<input type="text"/>
Rdiag Prefix	ca	id	<input type="text"/>
Serial No.	30000	Hospital	<input type="text"/> Hospital/TE1D48/
Department	<input type="text"/>	Street	<input type="text"/>
Station Name	YBN4005370	Street No.	<input type="text"/>
		Zip Code	<input type="text"/>
		Phone No.	<input type="text"/>
		City	<input type="text"/>
		District	<input type="text"/>
		Country	<input type="text"/>
		Administrator	<input type="text"/>

Below the table, there is a section for Service Center:

Service Center	ServiceCenter
Site Identification No.	<input type="text"/>
Service Center Phone	<input type="text"/>

The left sidebar contains a navigation menu with the following items:

- Local Host
- Site Info
- TCP/IP LAN
- Users
- Mount Type
- Security
- Settings
- Service
- Mail
- FTP
- Auto Transfer
- Encoding
- Backup Remote
- Licensing
- DICOM
- General
- Character Set
- Office Devices
- Network Nodes
- Print Devices
- HC Overview
- LUT Files
- HS/RS Notes
- Import/Export
- Diagnosys
- EPRU
- Servers
- External Devices
- Paper Printer
- PS LUT Files
- Applications
- Pat. Registration
- Viewers
- Config
- IMPPS
- Worklist Results
- Reporting
- Update Hospital logo
- Help/Documentation
- Help & Update
- Imaging System
- Valid Manager
- Application Fields
- Exam Set Configuration
- Edge Enhancement Filter
- Windowing LUT
- Logarithm LUT
- Resizing Section File
- Display Settings
- Subtraction Parameter
- Motion Detection
- Power Off Parameters
- Brightness Control
- Camera
- Circle Mask

Fig. 7: Configuration_Local Host_Site Info_1

Software installation

This date is set automatically during software installation and cannot be changed.

Handover

- Enter the date and time when the system was handed over to the customer.

System

Material no.

This material no. is entered automatically once the "system model" has been selected in the previous screen.

For ARCADIS Avantic, "10 04 7680" is displayed under "Material no.".

Rdiag prefix

This name is entered automatically once the "system model" has been entered in the previous screen. It is needed to generate a unique name for the remote transfer.

For ARCADIS Avantic, "ca" is displayed under "Rdiag Prefix".

Serial no.

- Enter the serial number of the main system.
 - ARCADIS Avantic 30000 to 30999

NOTE

The serial number is mandatory. It may not include any characters other than numbers from 0 to 9.

Department

- Enter the name of the department in which the system is located.

Station name

- Enter the "Computer name" here.
 - This is the same as the one you had to enter under TCP/IP LAN "Computer name" or is the same as you already entered during installation.

NOTE

The "Station name" and "Computer name" must be identical.

Service

Service center

- Enter the name of the responsible service center here.

Site identification number

- Enter the site identification number.

Service center phone

- Enter the telephone number of the responsible service center.

Customer and Address

Name

- Enter the name of the customer.

ID

- Enter the identification number of the customer.

Hospital

- Enter the name of the hospital.

Street

- Enter the street name.

Street no.

- Enter the street number.

Zip code

- Enter the zip code.

Phone no.

- Enter the phone number.

City

- Enter the city.

District

- Enter the state/province.

Country

- Enter the country.

Administrator

- Enter the name of the administrator who is responsible for this system.
- Select ">".

Site Info. 2

Setting the time zone

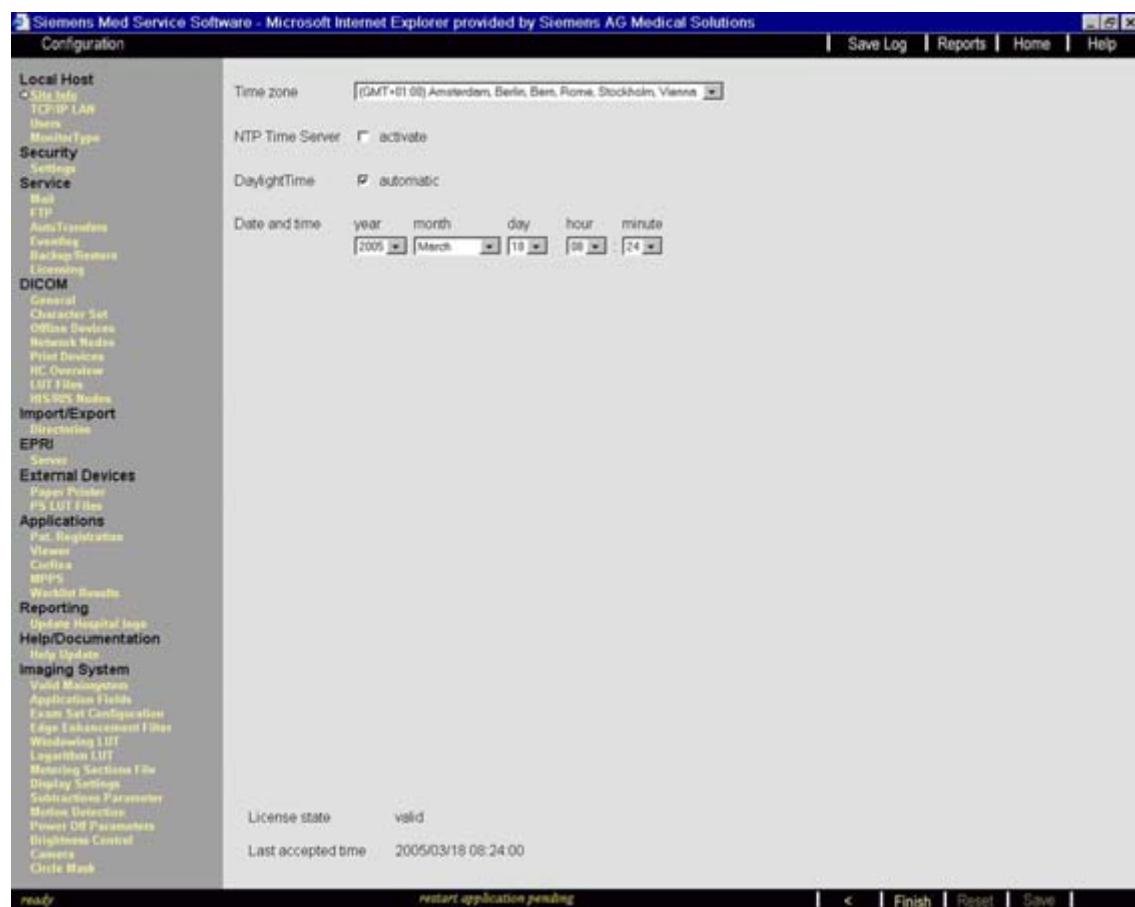


Fig. 8: Configuration_Local Host_Site Info_2

Time zone

- Select the "time zone".
 - Depending on the location of the system

NTP time server

- Do not select "NTP time server".

Select this only if the time is to be controlled via an NTP server at the customer's location.

- If the customer has requested that "NTP Time Server" be selected, you must also enter the IP address of the NTP server.

Daylight time

If the NTP time server was activated, these values are automatically accepted and no setting can be made.

- Select "Daylight time" automatic.
- Select the values for "Date and time".
- Click on "Save".
 ⇒ "You are going to change the time settings" " appears.
- Click "OK".
- Click "Next".

TCP/IP LAN

Requirements

When configuring the TCP/IP LAN properties, you must decide how much TCP/IP LAN support your system requires. The project manager is responsible for obtaining the necessary data from the hospital's network administrator or from the Siemens Uptime Service Center.

NOTE

If the customer cannot provide a unique IP address, you need to request a unique IP address from your Uptime Service Center. They can create unique IP addresses by means of the "IP Reservation Tool" in the TD Intranet (Product Information - Applications and Utilities). In this case, no DHCP, DNS, or WINS needs to be configured.

- Select TCP/IP LAN:

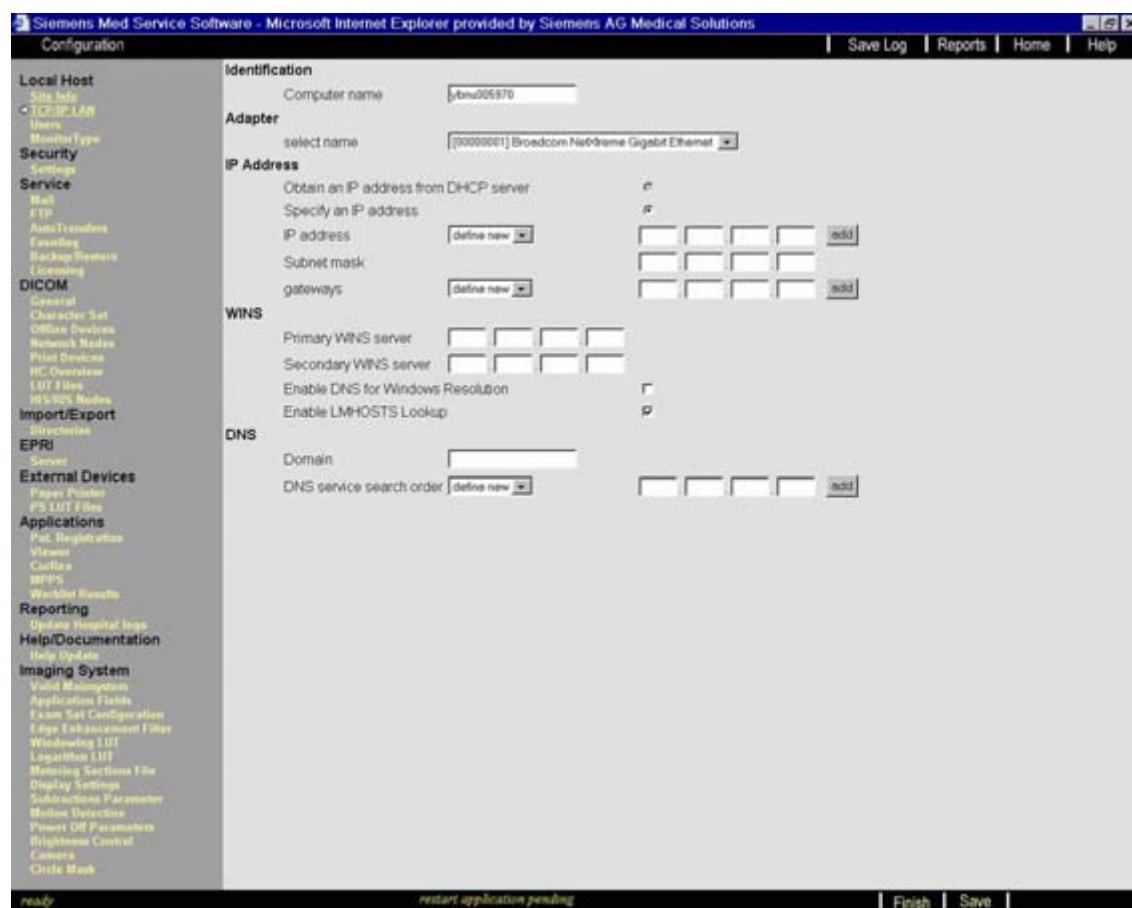


Fig. 9: Configuration_Local Host_TCP/IP LAN

Identification

Computer name

- check the computer name and change it if necessary, and keep this in mind when you reach the item below: "computer name or IP address changed."
- Make sure the station name is the same as entered under Site Info

NOTE

The "Station name" and "Computer name" must be identical.

Adapter

Select name

- Under "Select name," select the displayed name.

IP address

Obtaining an IP address from the DHCP server

NOTE

ARCADIS has not been released for use with a DHCP server.

Specify an IP address

- Select "Specify an IP address".

IP address

- If the IP address 192.168.1.1. is present, delete it.
- under "IP address" enter the Internet Protocol Address that has been assigned to the system, and keep this in mind when you reach the item below: "computer name or IP address changed."

Subnet mask

- Enter the subnet mask address.

Gateway

- Enter the "Gateway" address if available.

NOTE

If your system is connected to the RDIAG server that is responsible for you via an ISDN router, or is to be connected to it, please observe the Siemens Remote Service chapter.

WINS

(Windows Internet Naming Service)

Primary WINS server

- Do not enter anything under "Primary WINS server".

Secondary WINS server

- Do not enter anything under "Secondary WINS server".

Enable DNS for Windows resolution

- Do not select "Enable DNS for Windows resolution".

Enable LMHOSTS lookup

- Do not select "Enable LMHOSTS lookup".

DNS (Domain Name Server)

Domain

- Do not enter anything under "Domain".

DNS service search order

- Do not select or enter anything under "DNS service search order".

computer name or IP address not changed

- Select "Next".

Computer name or IP address has been changed**NOTE**

The system does not automatically perform a necessary reboot at this point.

- Click "Save".
 - ⇒ The message appears: "The change is only consistently saved after reboot! Use only home button"
- Click "OK".
 - ⇒ The following is displayed: "local host data successfully saved".
- Click "OK".
- Click "Home".
- Select "Utilities".
- Under "Source", select "System".
- Select "Restart system".
- Click "Go".
 - ⇒ The following is displayed: "System restart was selected".
- Click "OK".
 - ⇒ The system performs a restart.
- Open the service software again, as described at the beginning of this section.
- Select "Configuration".

Users

- Select "Users".



Fig. 10: Configuration_Local Host_Users

Account for UI

- Verify that "meduser" is entered under Account for UI.

Default password

- Highlight the "default password".

Enable Auto Login

- Highlight "Enable autologin".

Account for PPP

No setting possible.

Default password

- Highlight "Default password".

Account for Administrator

Random password

Without HIPPA configuration

- Highlight "Random password".
 - When this is done, the system generates a random password.
As a result, it is not possible to log on as the administrator.
- Click "Save".
- Click "Next".

With HIPPA configuration

- Enter the administrator password under "Password".
- Re-enter the administrator password under "Confirm".
- Click "Save".
- Click "Next".

Monitor Type

- Select "Monitor type".



Fig. 11: Configuration_Local Host_MonitorType

Monitor type

- Select "color".
 - Regardless of whether the monitor is black-and-white or color.
- Select "Siemens (pseudo color)".
- Click on "Save".
- Click "OK".

Security

Settings

NOTE

Only trained service technicians can make changes on this page.
If you made changes here and have saved them here, they can only be reset by performing a completely new installation of the system software!

- Select "Settings"



Fig. 12: Configuration_Security_Settings

Local security features

User management

- Do not select "User management".

Data access check

- Do not select "Data access check".

Functional check

- Do not select "Functional check".

Auditing

- Do not select "Auditing".

DICOM access

Enable trusted host function

- Do not select "Enable trusted host" function.

Remote service access

SSL encryption

- Do not select "SSL encryption".
- Click "Next".

Service

NOTE

If the system is connected to remote, following completion of the service software configuration, work through the document "Installation of Siemens Remote Service" with print number SP00-000.816.02.01.xx.xx.

Mail

This menu item makes it possible to configure the mail target for the "Auto report" function and for the service center defined in the customer user interface under the "Remote service" option.

- Select "Mail" under Service.



Fig. 13: Configuration_Service_Mail_1

Host properties

- Do not make any entries.
- Select ">".

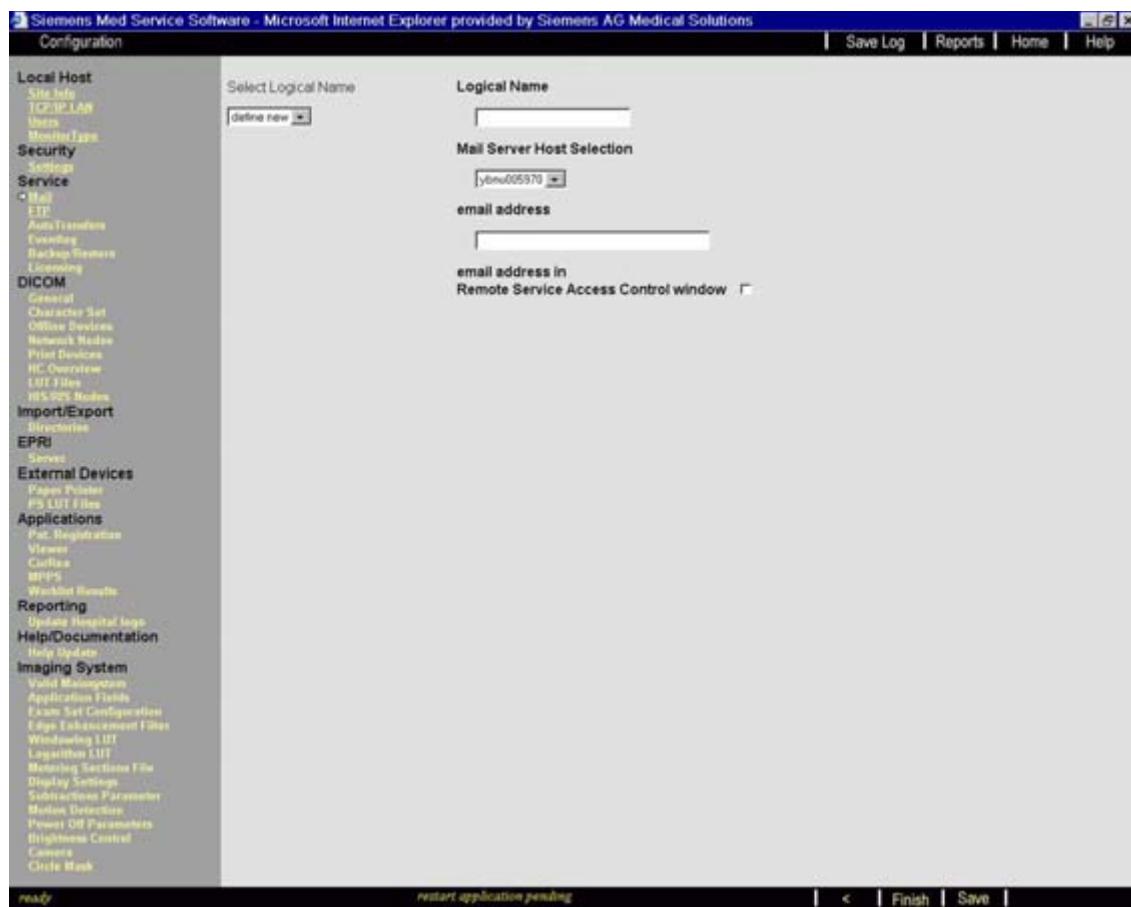


Fig. 14: Configuration_Service_Mail_2

Logical name

- Do not make any entries.
- Select "Next".

FTP

This menu item makes it possible to configure the file transfer target (FTP) for the Auto Report and the File&Image Tool functions.

A target is comprised of an FTP server and an FTP account on this server and can be linked via LAN (e.g., a router).

- Select "FTP".



Fig. 15: Configuration_Service_FTP_1

Host properties

- Do not make any entries.
- Select ">".

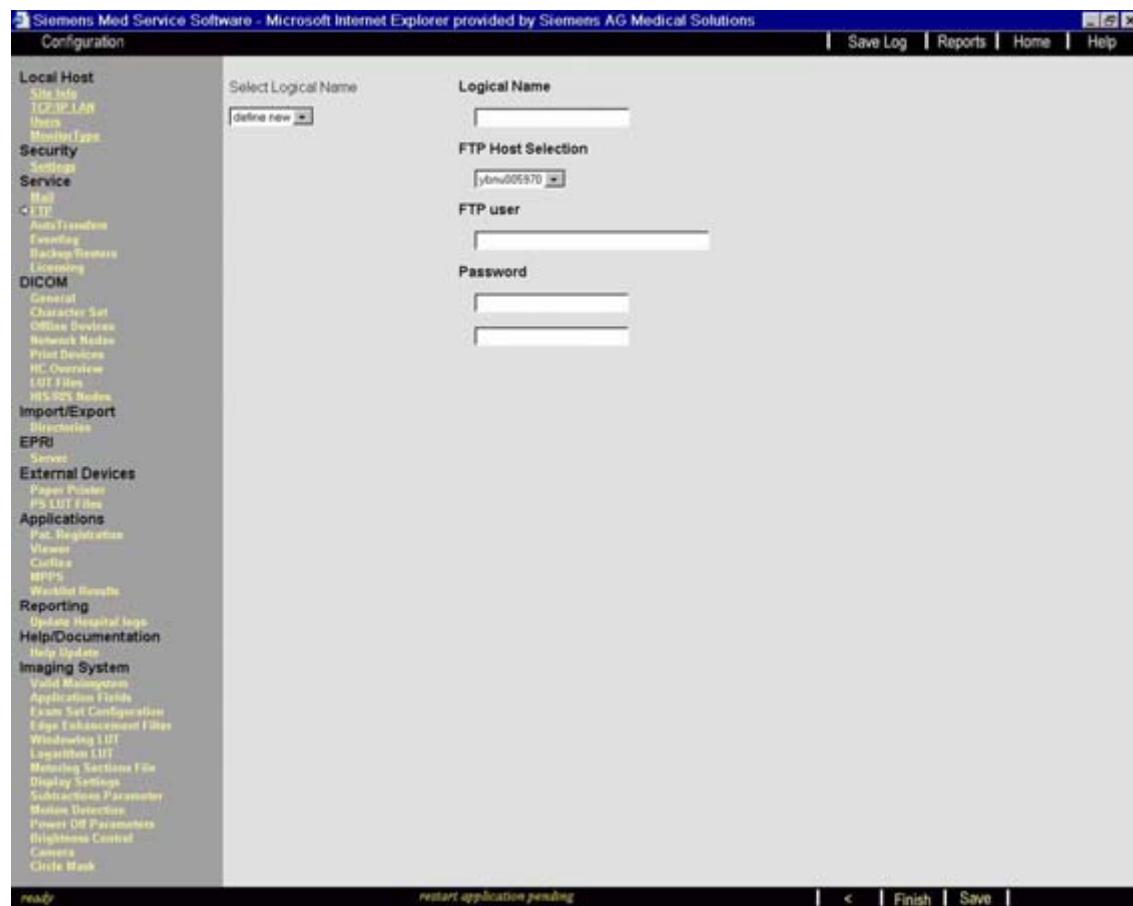


Fig. 16: Configuration_Service_FTP_2

Logical name

- Do not make any entries.
- Select "Next".

Auto transfer

- Select "Auto transfers".



Fig. 17: Configuration_Service_AutoTransfers

- Check that "Automate automatic transfers" is not selected.
- Select "Next".

Event log

The "Event log" function allows you to customize the contents of the event log of your service software.

- Select "Event log".



Fig. 18: Configuration_Service_Eventlog

Log only service messages

- Check whether "Log only service messages" is activated.

Display service messages

- Check whether "Display service messages" is activated.

Display sequence number

- Check whether "Display sequence number" is activated.
- Click "Save".

Backup/Restore

- Select "Backup restore".

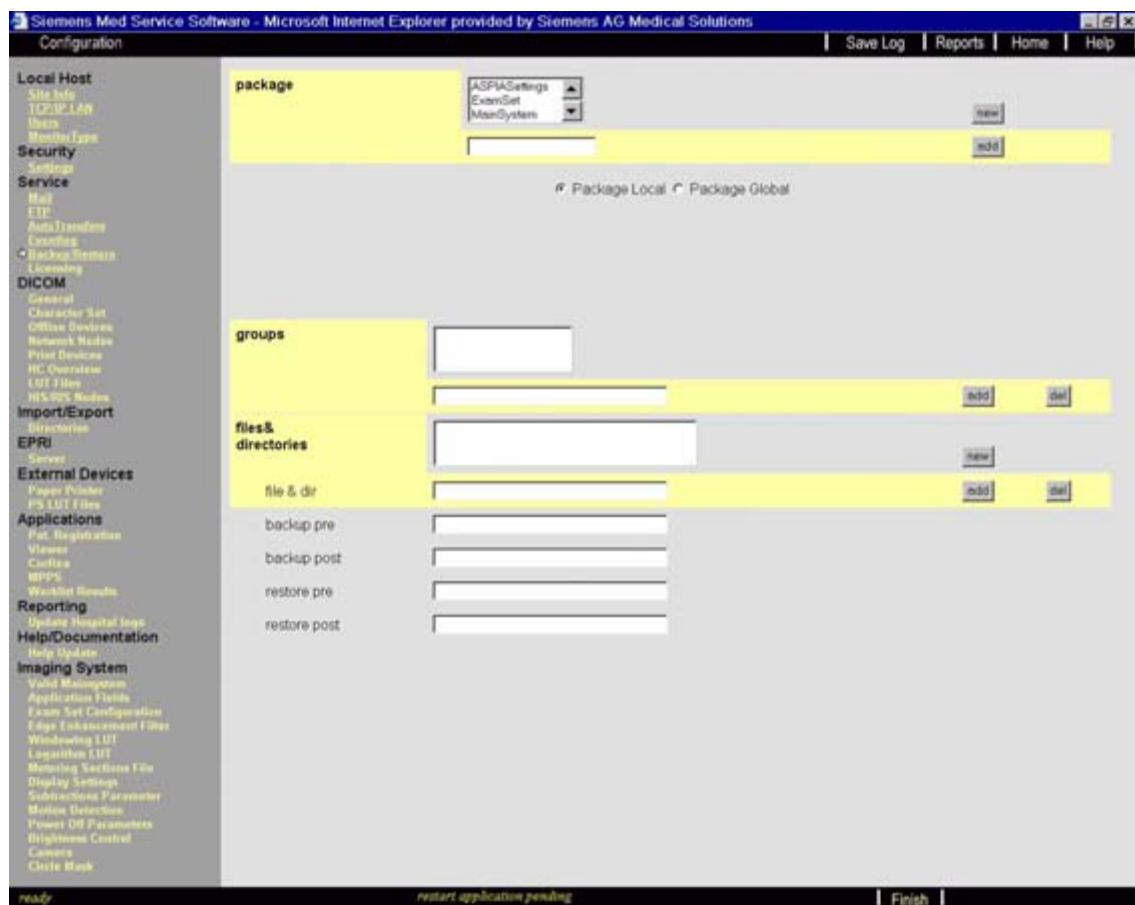


Fig. 19: Configuration_Service_Backup/Restore

- Do not make any entries.
- Click "Next".

Licensing

Several applications are protected with one license key. This licensing function allows you to display and modify an existing application license or to add a new application license to the system.

NOTE

All licenses can be requested from the UPTIME Service Center,
CS HSC 1 (+49 9191-188080).

- Select "Licensing".



Fig. 20: Configuration_Service_Licensing

- Do not make any changes; the licenses were already downloaded during software installation.
- Click on "Finish".

DICOM

DICOM allows you to specify the parameters for the DICOM communication interfaces of your system and of the remote systems.

AET = Application Entity Title

General

- Select "General".



Fig. 21: Configuration_DICOM_General_1

Local application entity titles

HIS/RIS

- Enter the AET for HIS/RIS here.

Study transfer

- Enter the AET for study transfer here.

Print

- Enter the AET for print here.
- Click on ">".



Fig. 22: Configuration_DICOM_General_2

- Do not make any changes on this page.
- Select "Next".

Character Set

- Select "Character set".



Fig. 23: Configuration_DICOM_Character Set

DICOM default character set

- Select "Allow only one character set".
 - Select "ISO_IR 100":
 - The settings need to be changed only if the keyboard requires this.
- ISO IR 6 for USA (ASCII)
ISO IR 13 for Japan

Offline Devices

Using offline devices, you can make settings for DICOM offline devices (media storage) on the local host.

- Select "Offline devices".



Fig. 24: Configuration_DICOM_Offline Devices

- Select "Define new".
- Select CD_RW under "Logical name".
- Do not select "Archive Device".

NOTE

"Archive Device" must not be selected, since a CD-ROM may not be used as a long-term archive.

Drive type

- Select "CD-RW drive".
- Select "Read/Write" under "Access".
- Select "8" under "Recording speed".
- Do not select "Optical Disk Drive" and "default".

- Do not select "SPI file system".

Drive letter

- Select "R:\\".

NOTE

If R:\ cannot be selected and/or the "save" button is not visible, make sure there is no CD in the CD-ROM drive. If there is a CD there, the system should be switched off, then switched back on.

SCSI settings

- Do not select anything under "Adapter".
- Do not select anything under "Bus".
- Do not select anything under "Target".
- Select "Save".
- Select "Next".

Network Nodes

The DICOM nodes for storage (send and receive) and query/retrieve are defined here. Please note that DICOM printers and the Radiology Information System (RIS) are not configured here.

The image transfer or query/retrieve targets entered can be selected in the viewer's or patient browser's menu "Transfer - Send to..." .

The entered query/retrieve targets can be selected in the viewer's or patient browser's menu "Patient - Search".

- Select "Network nodes" under DICOM.



Fig. 25: Configuration_DICOM_Network Nodes_1

Host properties

Network nodes not available:

- Select ">".

Network nodes available:

- Under "Select Host", select "Define new".

Host name

- Enter the host name.

TCP/IP address

- Enter the IP address.

Connected by

- Select "LAN".
- Select "Save".
- Select ">".

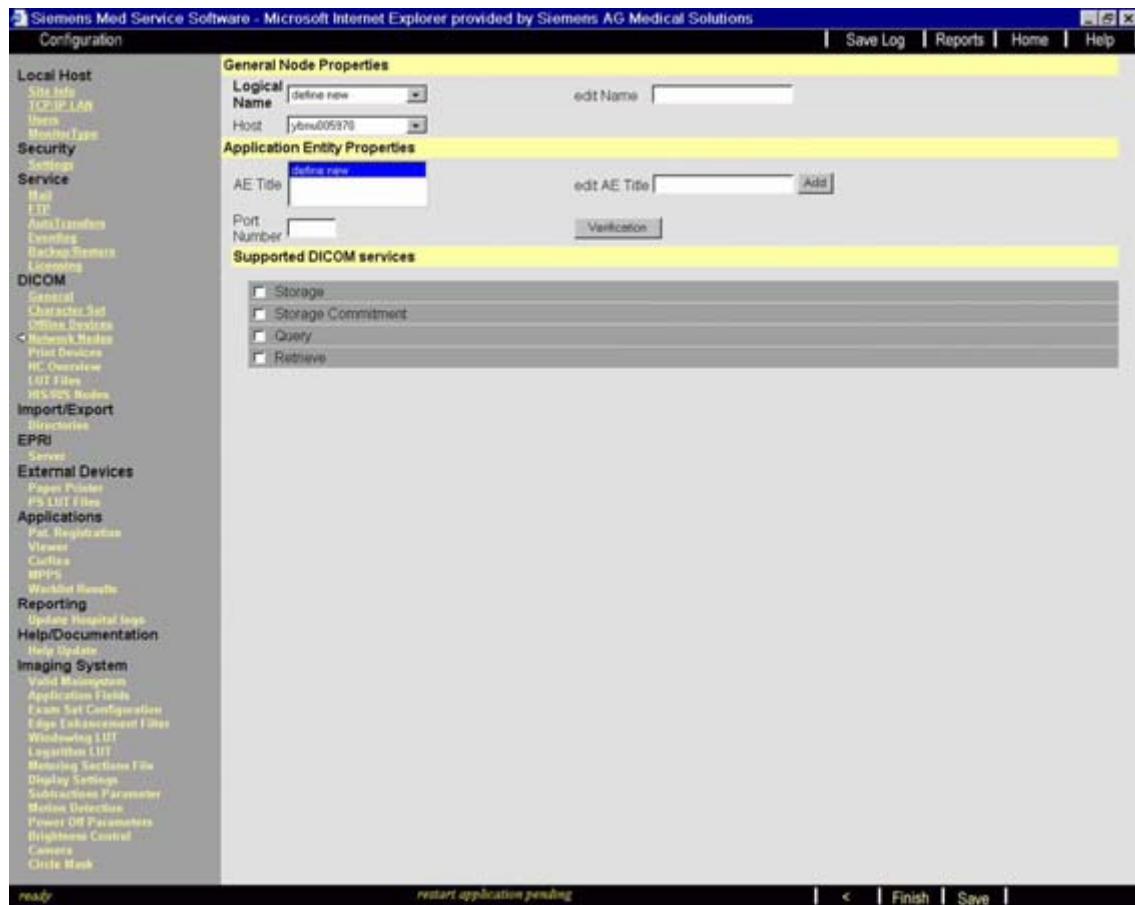
General node properties

Fig. 26: Configuration_DICOM_Network Nodes_2

Logical name

- Select "Define new".

Edit name

- Enter the name under "Edit name".

Host

- Under "Host", select the name entered on the previous page.

Application entity properties

AE title

- Select "Define new".
 - The already configured AETs are shown in the pull-down menu.

Edit AE Title

- Enter a name in the "Edit AE title" box.

Port number

- Enter the port number for the DICOM unit.
- Click "Add".
- Do **not** select Verification.

Supported DICOM services

Select the DICOM services that the customer has purchased and which are to be performed by the corresponding system.

NOTE

At least "Storage" must be selected.

Changes should only be made by an application engineer due to possible impact on the customer interface.

Storage

- Select "Storage".
- Select "Retrieve" if the particular DICOM unit is to support query.
- Click "Save".
- Do not make any changes under "Storage".

Storage commitment

- Select "Storage commitment" if the particular DICOM unit is to be configured as the storage commitment provider.

Query

- Select "Query" if the particular DICOM unit is to support query.

- Select "Patient root" under Provides DICOM query model.

Retrieve

- Select "Retrieve" if the particular DICOM unit is to support retrieve.
- Click "Save".

Print Devices

Here you define the DICOM laser cameras that are connected to your system via DICOM Basic Print. A local printer is NOT a DICOM printer!

This system does not support the SPCI/SPDI camera interface.

NOTICE

If a printer needs to be deleted, e.g., following an incorrect entry, the correct sequence of print devices 3 to print devices 1 must be observed.

⇒ Otherwise, problems can occur, e.g., in the "Filming" application card, in the user interface or when making registration settings.

NOTE

You will find the installation instructions for each released camera on CB-DOC under Installation, in the "Camera" catalog.

NOTE

Configuring "Print Devices" without the necessary DICOM license will result in a system error.

The error can only be corrected by performing a completely new installation!

Print devices 1

- Verify that the required DICOM basic license is available.
 - To do so, proceed as follows:
In the Service software, go to --> Configuration --> Service --> Licensing.
ASPIA_DICOM_BASIC...."should be listed under Licenses.
- Select "Print devices".



Fig. 27: Configuration_DICOM_Print Devices_1

Host properties

- Under "Select Host", select "Define new".

Host name

- Enter the host name of the DICOM camera.

TCP/IP address

- Enter the IP address.

Connected by

- Select "LAN".
- Select "Save".
- Under Select Host, select the host name entered for the DICOM camera.
- Select ">".

Print devices 2

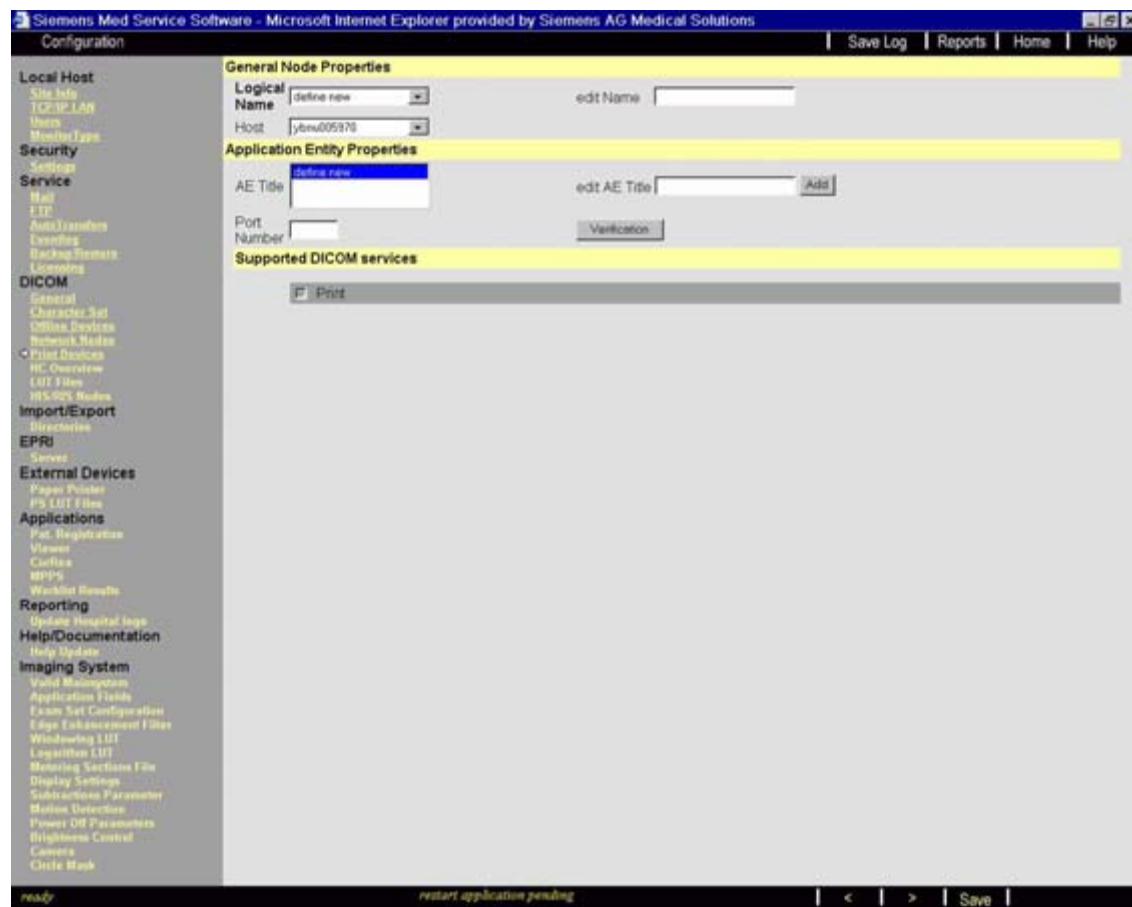


Fig. 28: Configuration_DICOM_Print Devices_2

General node properties

Logical name

- Select "Define new".

Edit name

- Enter the name under "Edit name".

Host

- Under "Host", select the name entered on the previous page.

Application entity properties

AE title

- Select "Define new".
 - The already configured AETs are shown in the pull-down menu.

Edit AE Title

- Enter a name in the "Edit AE title" box.

Port number

- Enter the port number for the DICOM unit.
- Click "Add".
- Do not** select Verification.

Supported DICOM services

Print

- Select "Print".
- Select "Save".
- Select ">".

Print devices 3

Fig. 29: Configuration_Dicom_PrintDevices3

Select HC device

- Select "Define new" under Select HC device.

HC device

- Enter the name of the camera.
 - This will be displayed in the customer interface in the "Print" tab card.

Default camera

- Select this option to define the camera as the standard camera.

The other cameras need to be selected via a pull-down menu in the print tab card at the customer user interface.

General settings

Type

- Select "DICOM printer".

Class

- Select your released DICOM camera in the drop-down list.
Do not make any other changes on this page.

If your camera is not yet released or not in the list, contact the responsible Headquarter Support Center.

- Select "Save".

HC Overview

NOTE

This menu has no meaning for the service engineer, since the settings and tests can also be performed in the print device" menu.

The "Hard copy overview" menu is intended to provide the customer with a menu to manipulate and test certain camera settings.

- Select "HC overview".

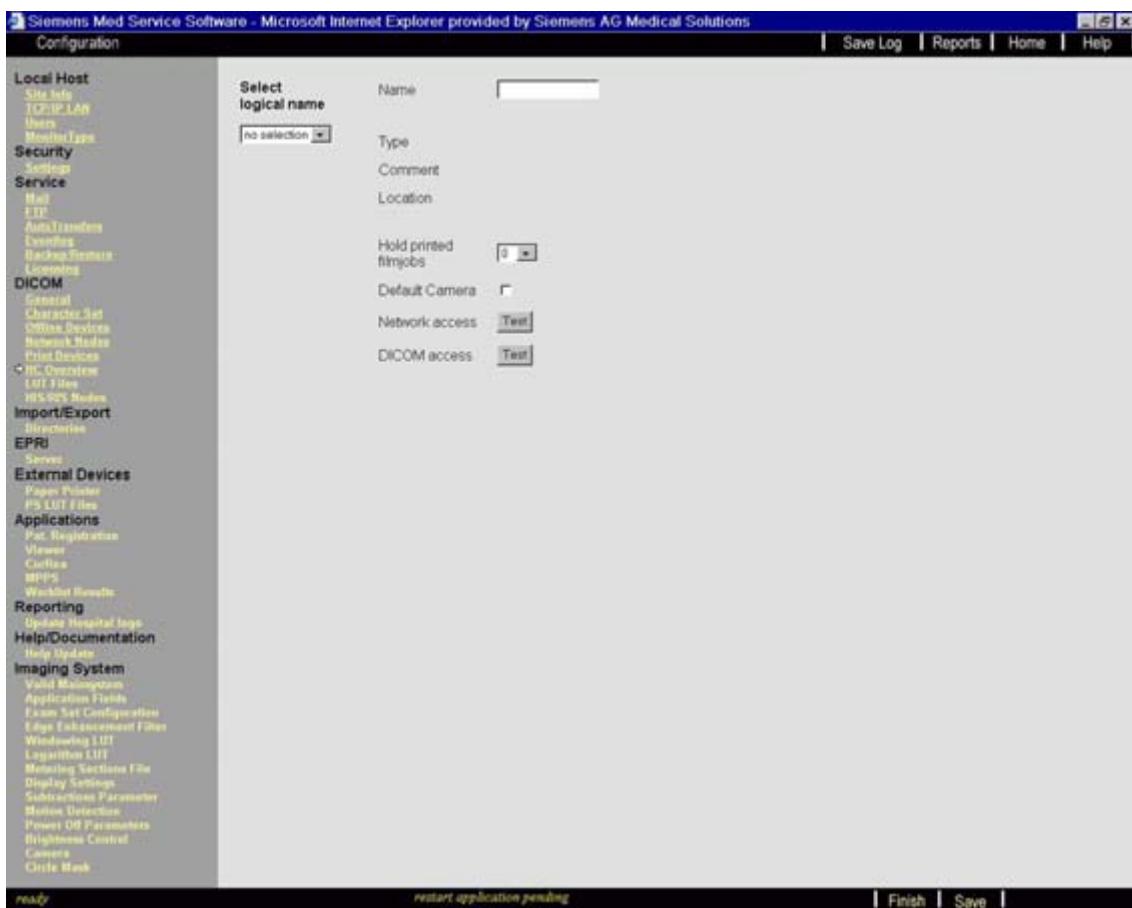


Fig. 30: Configuration_DICOM_HC Overview

- Do not make any changes under HC overview.
- Select "Next".

LUT Files

This menu allows you to import, remove, and select LUT files (lookup table) for DICOM Basic Print. Currently, no tool is available for modifying a lookup table (LUT Editor).

NOTE

The Correction LUT for the system can be found under "XRFImage".

- Select "LUT files".

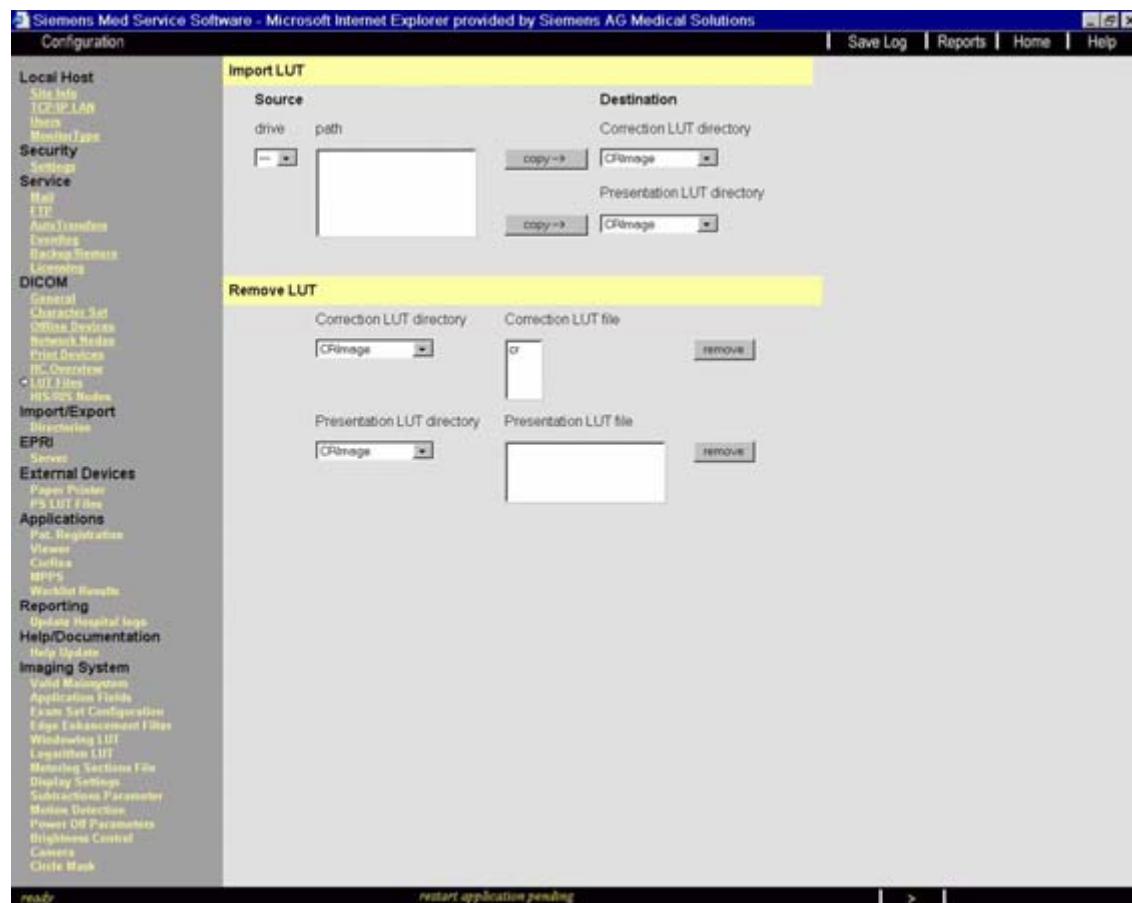


Fig. 31: Configuration_DICOM_LUT Files_1

- Do not make any changes.
- Click ">".

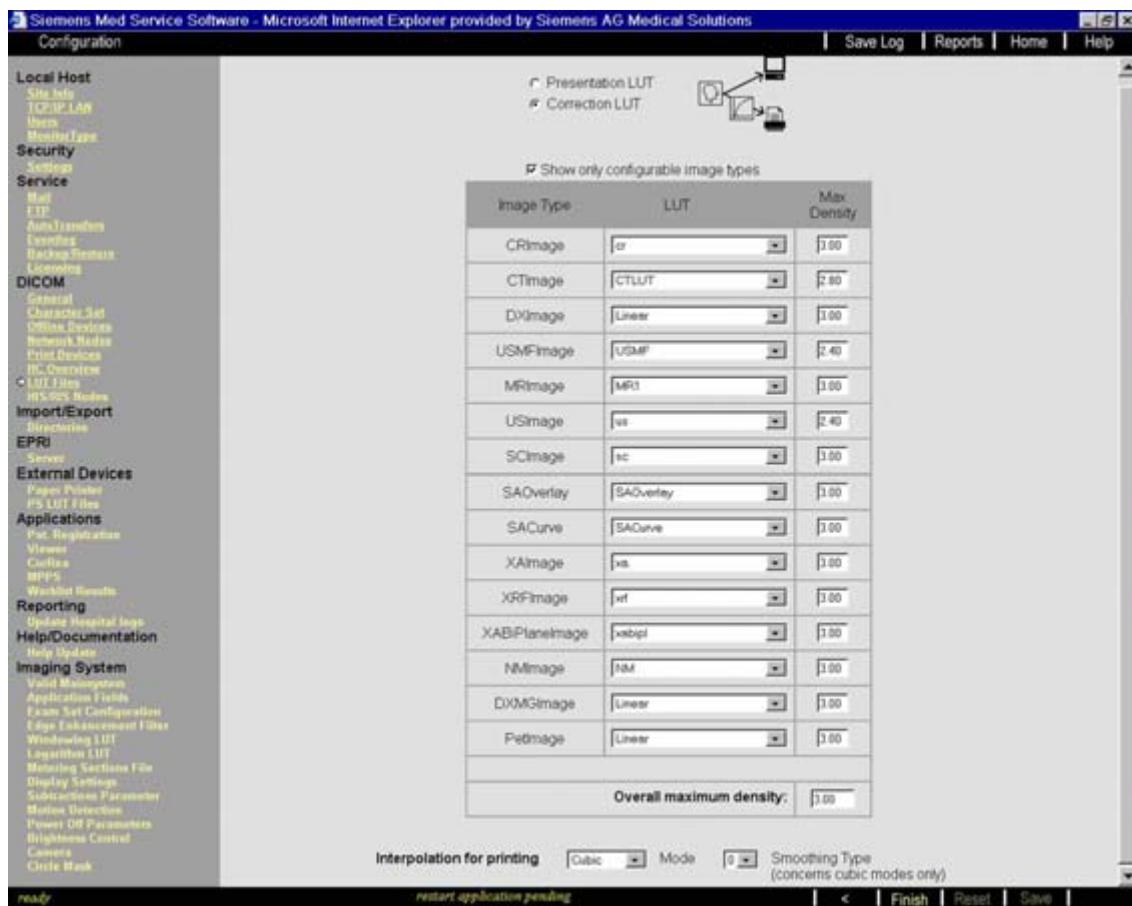


Fig. 32: Configuration_DICOM_LUT Files_2

- Select "Correction LUT".
- Select XAImage.
- Check whether "xa" is selected.
- Click "Save".

Max. density

- Do not make any changes.

Overall maximum density

- Verify that the value is 3.00; if not, enter this value.

Interpolation for printing

- Check whether "Cubic" is selected.

Mode

- Do not make any changes.
- If changes were made in one of the previous points, select "Save".

HIS/RIS Nodes

Configuration of a Hospital Information System (HIS) or Radiology Information System (RIS) that supports DICOM Basic Worklist or the Detached Study Transfer service. In many cases, the RIS is connected via an interface box such as the Mitra Broker (Magi-cLink HL7).

HIS / RIS nodes 1

- Select "HIS/RIS nodes".



Fig. 33: Configuration_DICOM_HIS/RIS_Nodes_1

Host properties

- Under "Select Host", select "Define new".

Host name

- Enter the host name of the HIS/RIS node.

TCP/IP address

- Enter the IP address.

Connected by

- Select "LAN".
- Select "Save".
- Under Select host, select the host name entered for HIS/RIS.
- Select ">".

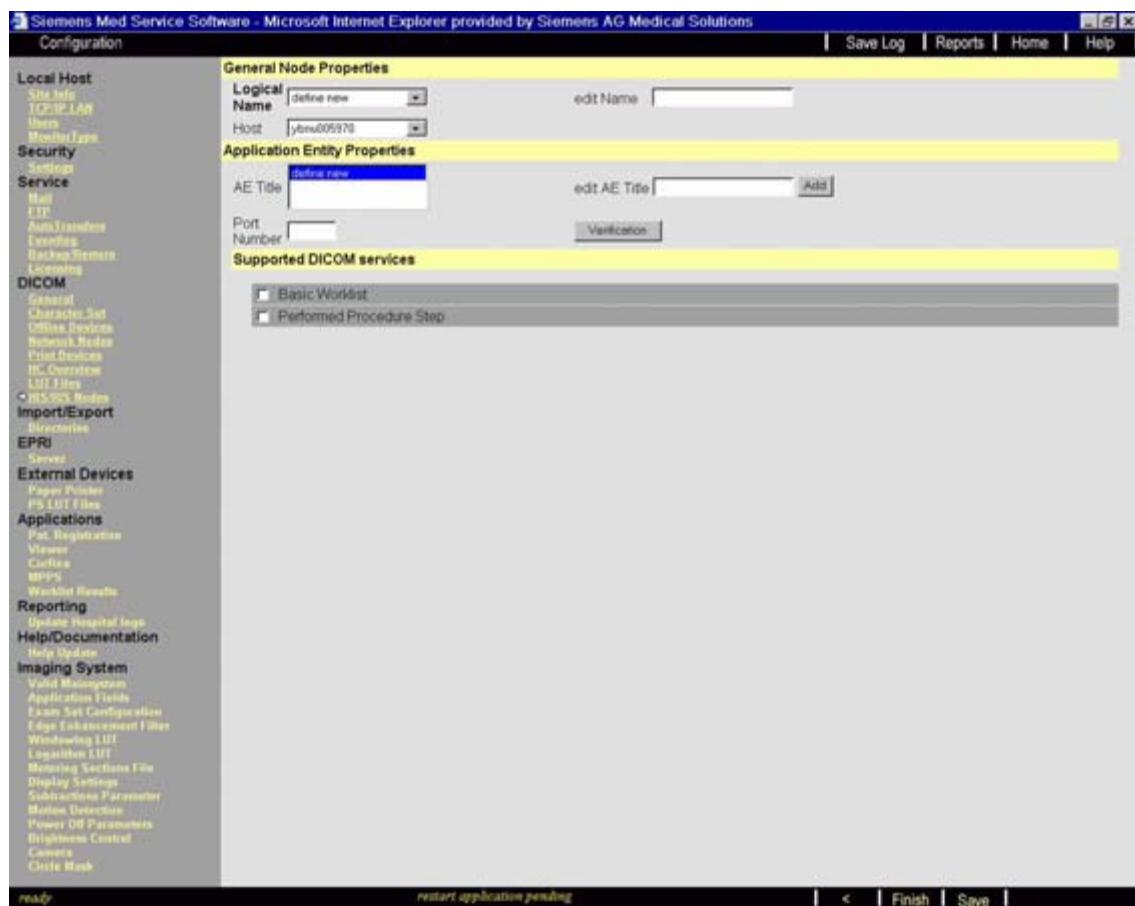


Fig. 34: Configuration_DICOM_HIS/RIS Nodes_2

General node properties**Host**

- Under "Host", select the name entered on the previous page.

Logical name

- Select "Define new".
 - The DICOM worklist request will run in the background and only one HIS/RIS can be selected. As a result, the logical name is not displayed in the customer user interface.

Edit name

- Enter the name under "Edit name".
 - The name can be selected freely.

Application entity properties

AE title

- Select "Define new".
 - The already configured AETs are shown in the pull-down menu.

Edit AE title

- Enter a name in the "Edit AE title" box.

Port number

- Enter the port number for the DICOM unit.
- Click "Add".
- Do **not** select Verification.

Supported DICOM services

Basic worklist

NOTE

At minimum, "Basic worklist" has to be selected.

- Select "Basic worklist".

Query waiting time

- Check whether 20 sec. is listed; if not, enter this.

Max query match number

- Check whether 200 matches is listed; if not, enter this.

Query interval

- Check whether 60 minutes is listed; if not, enter this.

NOTE

To activate the automatic DICOM Worklist polling function, it is necessary to select "HIS/RIS update worklist in background" in the customer user interface under "Option - Configuration - Patient Registration".

Default basic worklist node

- Select "Default basic worklist node".

Performed procedure step

NOTE

Do not edit this point if MPPS is being used.

At the beginning and following patient acquisition, the DICOM Service Modality Performed Procedure Step (MPPS) sends data to the information system (e.g., RIS). Select this option if the selected information system is the destination to be used for this DICOM service.

Default catalog name

- If codes are used, enter the name of the coding catalog being used in the information system.
- MPPS uses codes instead of readable values.

Default catalog version

- If codes are used, enter the version of the coding catalog being used in the information system.

Default PPS node

- Select "Default PPS node".
- Click "Save".

Import/Export

The system provides the function to import or export DICOM images from/to the file system. In this section, you need to specify the location of the import/export directories. They will be located on the local system or on a shared directory.

For shared directories, you first need to configure the host on which the shared directory is located.

To import/export DICOM images you need to select 'Transfer - import from offline' or 'Import/export to offline' at the customer user interface.

Directories

- Select "Directories".



Fig. 35: Import/Export_Directories_1

Host properties

- Under "Select Host", select "Define new".

Host name

- Under "Host name", enter the computer name of the system.

TCP/IP address

- Enter the IP address.

Connected by

- Select "LAN".
- Select "Save".
- Select the host name entered under Select Host.
- Select ">".

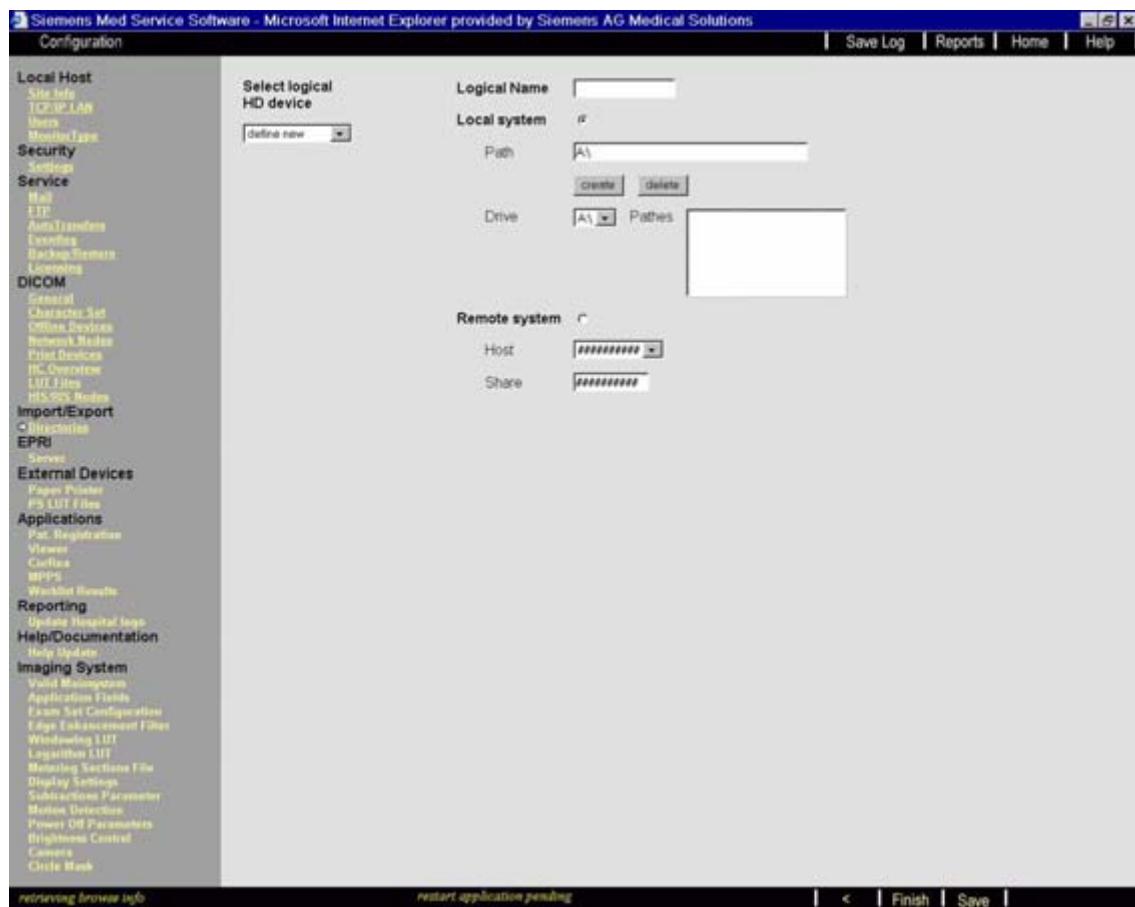


Fig. 36: Import/Export_Directories_2

Select logical HC device

- Select "Define new".

Logical name

- Select "DICOM tools" under Logical name.
 - The logical name will be displayed in the customer user interface under 'Transfer - Off-line - Export / Import'.

Local system

- Select "Local System".
- Enter the path "C:\Syngo\Service\dst\img".
- Select the drive name C:\ under Drive.
- Select "Create".
- Select "Save".

Remote system

- Do not select "Remote system".

Host

- Do not make any entries.

Share

- Do not make any entries.
- Click "Next".

EPRI

The EPRI (Electronic Patient Record Interface) is a web interface (Internet Explorer browser) to a server which provides additional data about the selected patient.

Servers

The customer user interface provides a button to open a web browser with a link to an EPR server. The URL and the type of EPR server need to be specified in this menu.

- Select "Server".



Fig. 37: EPRI_Server

EPR interface

Location of EPR server

- Do not make any changes under Location of EPR server.

Type of EPR server

- Do not make any changes under Type of EPR server.
 - Currently, only the WebEPR server from Siemens HS is released (as the default server).

External Devices

Paper Printer

NOTE

The driver for the paper printer must be installed per the "Trouble-shooting, Software, Service Information" instructions with print no. SPR2-310.840.01.xx.xx.

NOTE

Even locally networked screen printers are labeled as paper printers in Syngo.

Only the media format can be defined in this menu.

- Select "Paper printer".



Fig. 38: External Devices_Paper Printer

Available paper printer media formats

- Select "A4" and "8x10" and deselect all other formats.
- Click on "Finish".

PS LUT Files

- Select "PS LUT files".

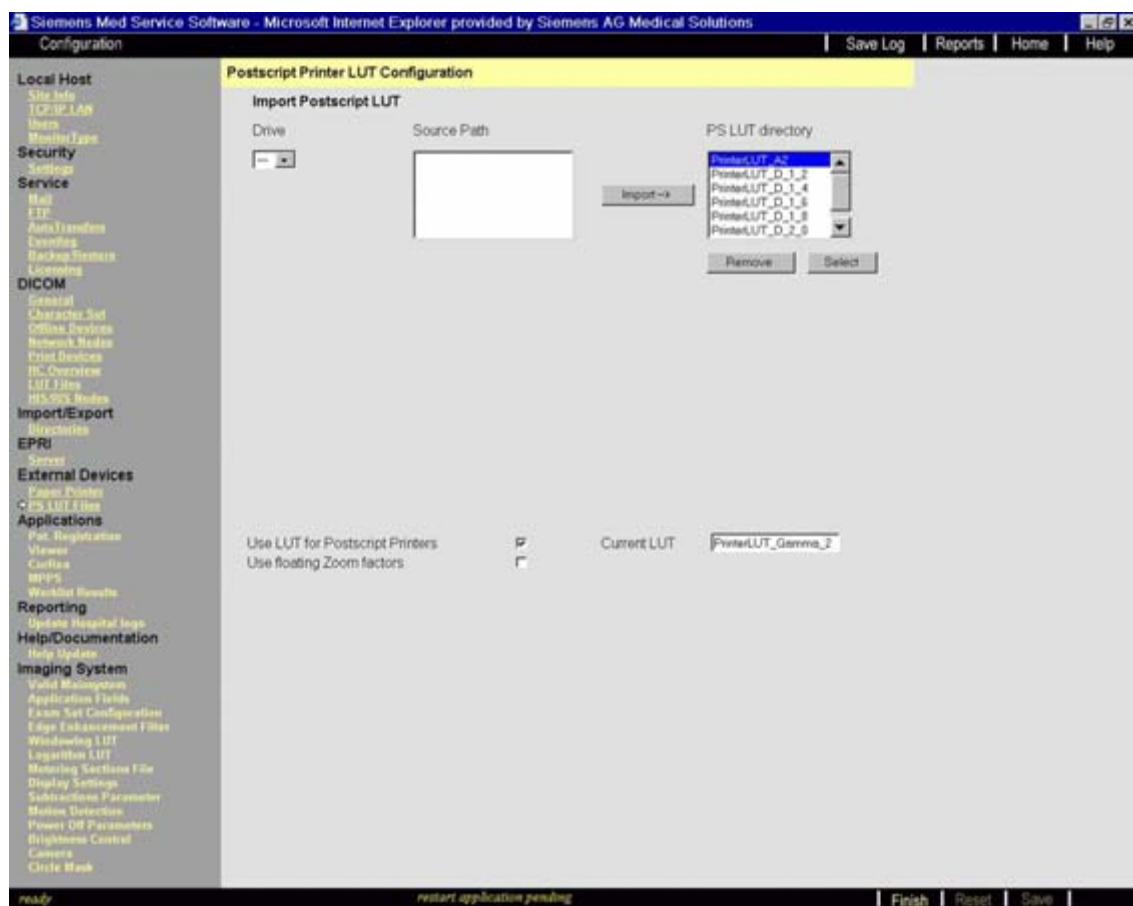


Fig. 39: External Devices_PS LUT Files

Sony printer

- Ensure that "Use LUT for postscript printers" is selected.
- Ensure that "Use floating zoom factors" is not selected.

Characteristic curve

- Select the "PrinterLUT_Gamma_1_8" characteristic curve under "PS LUT directory".
- Click "Select".
- Click "Save".

Applications

Menus for setting application parameters are available under "Applications".

NOTE

As a rule, changes are made only in conjunction with application specialists.

Pat. Registration

- Select "Pat. registration".

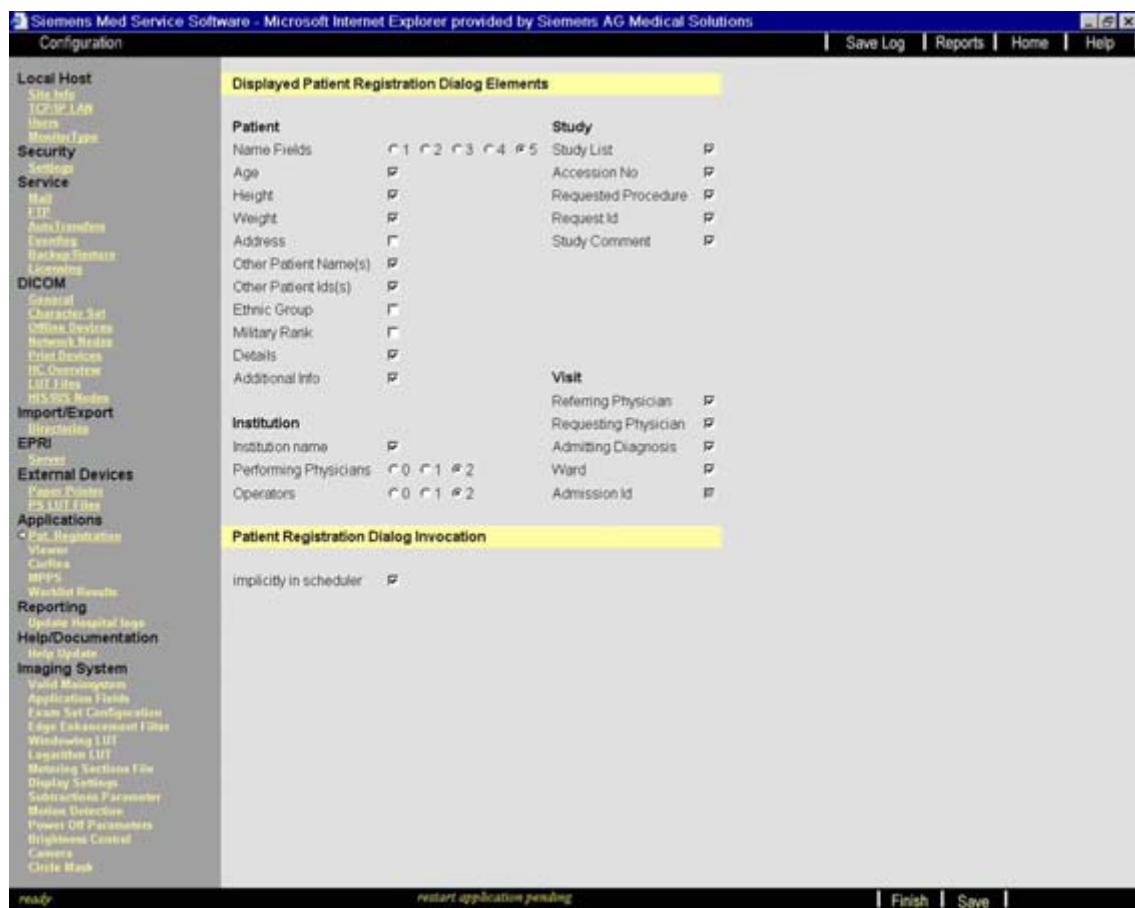


Fig. 40: Applications_Pat. Registration

Patient

- Do not make any changes.

Institutions

- Do not make any changes.

Patient Registration Dialog Invocation

- Do not make any changes.

Study

- Do not make any changes.

Visit

- Do not make any changes.
- Click "Finish".

Viewer

- Select "Viewer".



Fig. 41: Applications_Visualizer

Viewer configuration settings

Close all studies when a new one is loaded

- Do not select.

Close all series when a new one is loaded

- Do not select.
- Click "Finish".

CorRea

In this menu, you can set the attributes that can be modified in the CorRea(=Correct & Rearrange Platform).

- Select "CorRea"; do not make any changes.



Fig. 42: Applications_CorRea

Displayed CorRea dialog elements

Patient

- Do not make any changes.

Hospital

- Do not make any changes.

Study

- Do not make any changes.

Instance

- Do not make any changes.

Series

- Do not make any changes.
- Select "Finish".

MPPS

(Modality Performed Procedure Steps)

NOTE

Required settings that go beyond this syngo configuration can be performed only in cooperation with the responsible hospital network administrator.

The attributes defined here are displayed in the customer user interface when an MPPS message is sent to the RIS.

- Select "MPPS".



Fig. 43: Applications_MPPS

Displayed MPPS dialog elements

- Do not make any changes.
- Select "Finish".

Worklist Results

The attributes displayed after a DICOM worklist request in the patient registration form will be set in this menu.

- Select "Worklist results".



Fig. 44: Applications_Worklist Results

Displayed HISRIS worklist result attributes

- Do not make any changes.
- Select "Finish".

Reporting

Update Hospital Logo

A hospital logo can be loaded here.

This is then displayed and printed in the radiation summary report.

Only bitmap files can be loaded.

- Select "Update hospital logo".

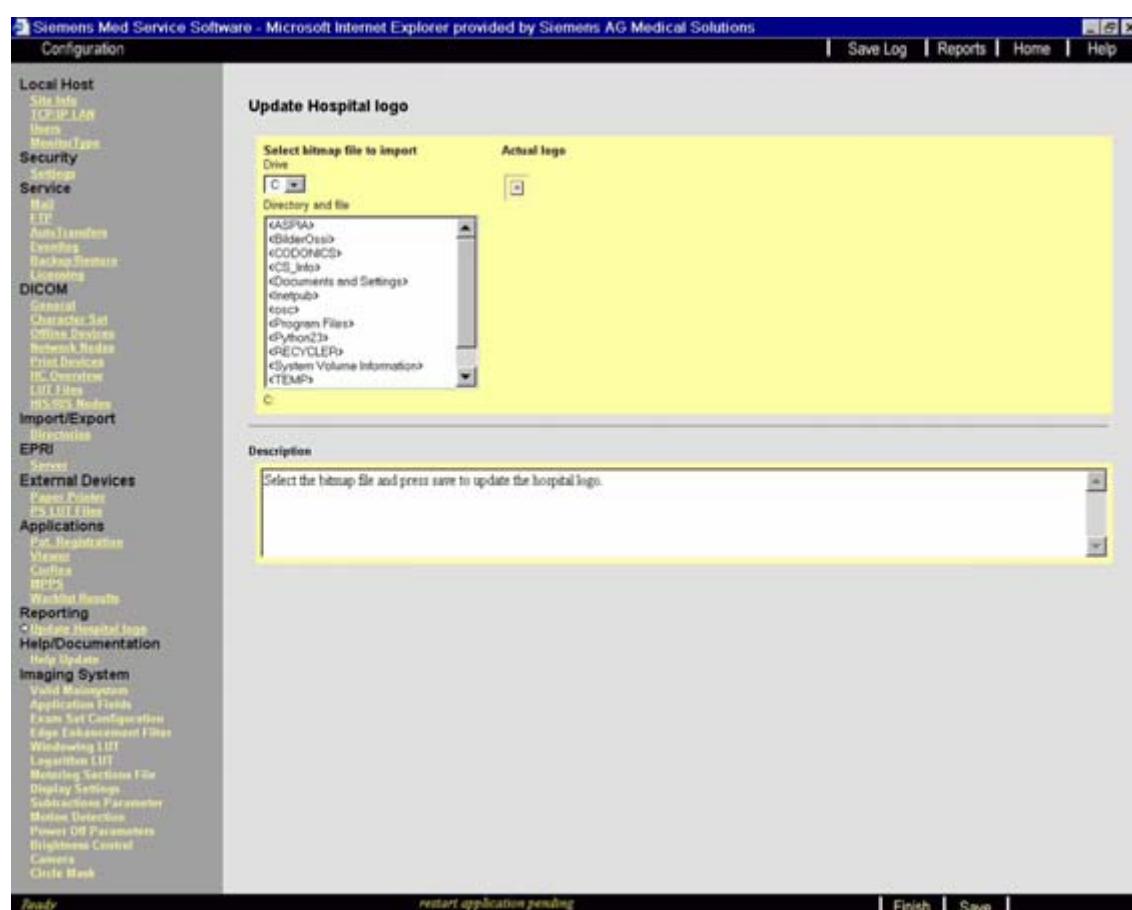


Fig. 45: Reporting_Update Hospital Logo

No bitmap file available

- Click "Next".

Bitmap file available

- Select the drive under "Drive".
- Select the path under "Directory and file".
- Click "Save".

Deleting a bitmap file

If a bitmap file is installed, a "Delete" button appears.

Proceed as follows if a bitmap file should be deleted.

- Click on "Delete" button.
 - ⇒ This deletes the bitmap file, and a new one can be installed.

Help/Documentation

Help Update

The "Quick Reference Guide" is imported here.

- Select "Help update".

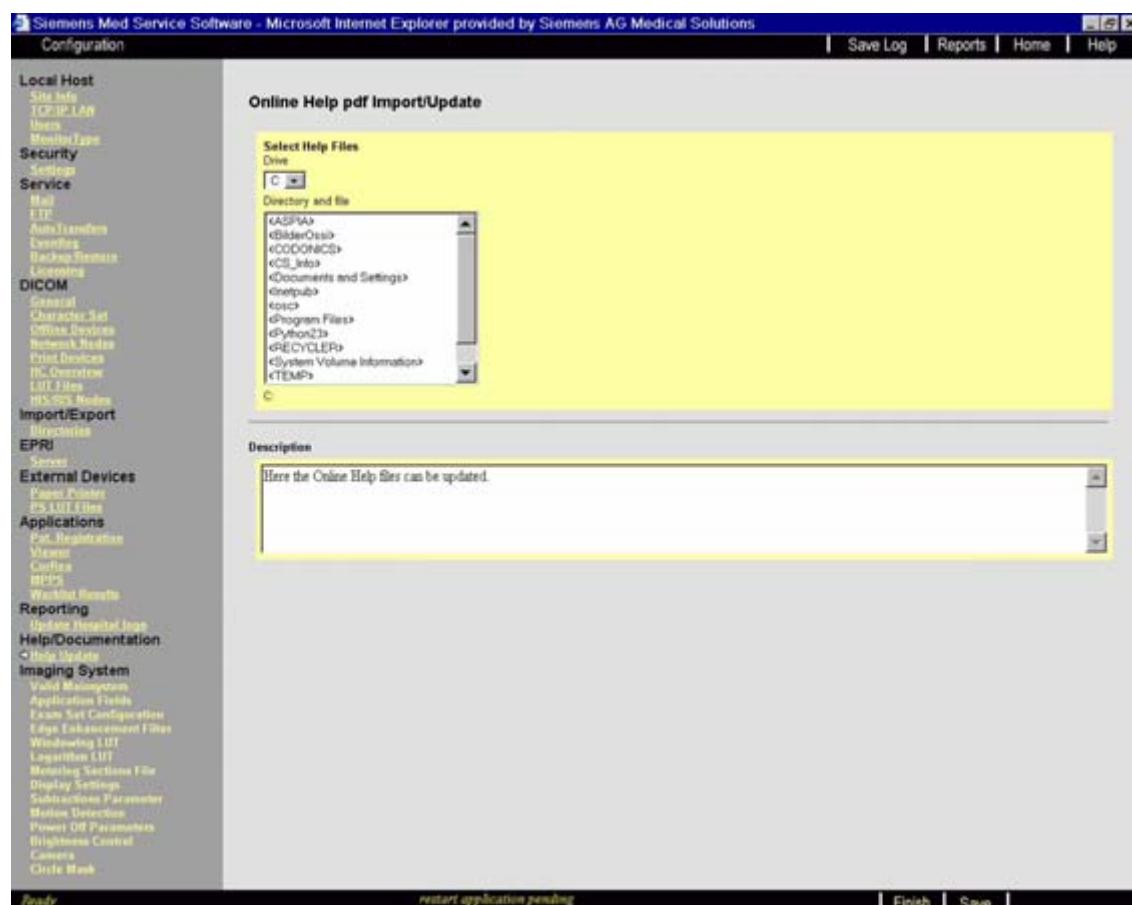


Fig. 46: Help/Documentation_Help Update

Operator manual

- Place the "Quick Reference Guide" CD in the CD drive.
- Select the drive under "Drive".
- Select the path and file under "Directory and file".
- Click "Save".

Imaging System

NOTE

The Examination Set Editor may not be opened.

Valid Mainsystem

- Select "Valid Mainsystem".

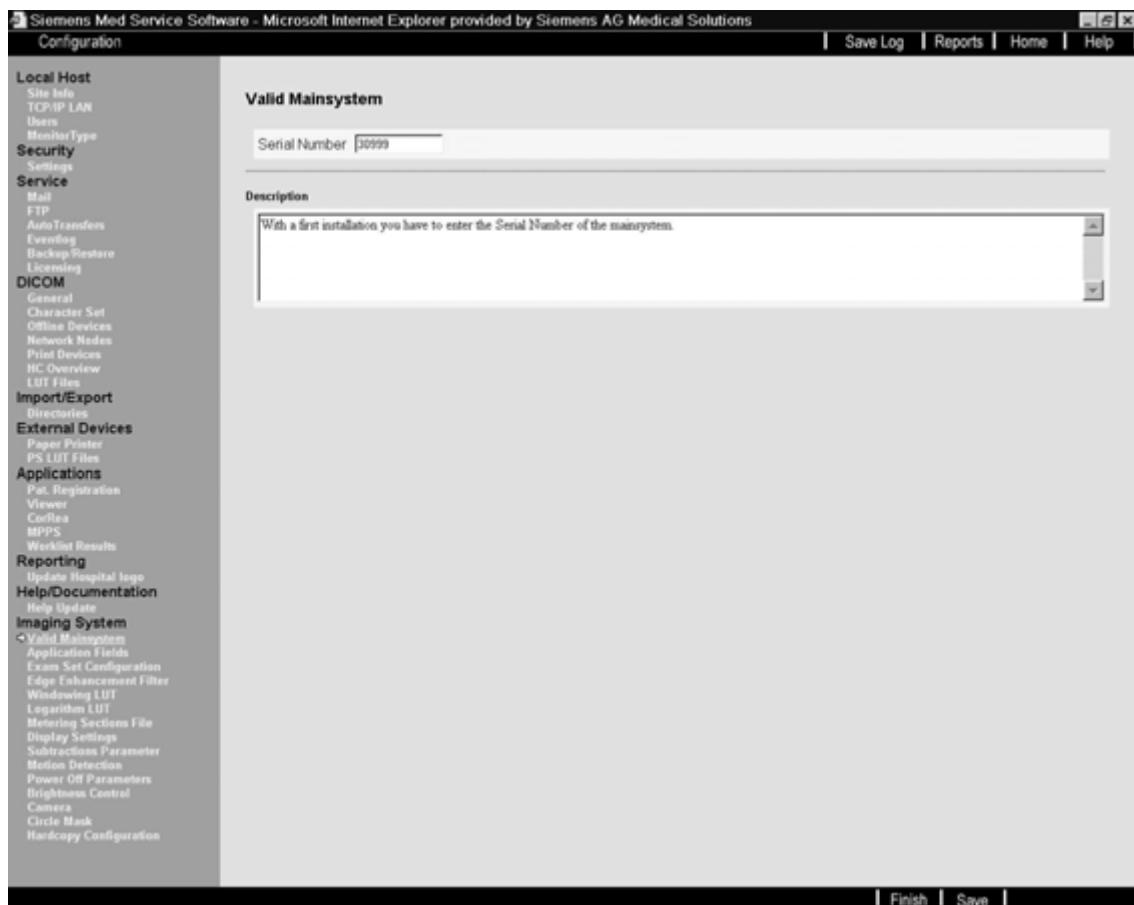


Fig. 47: Config_ImagingSystem_ValidMainsystem

- Enter the serial number of the connected main system.
- Select "Save".

Application Fields

NOTE

For "Application Fields" that require a license, you must first load the license. Then you will be able to activate this "Application Field" as described below.

- Select "Application fields".

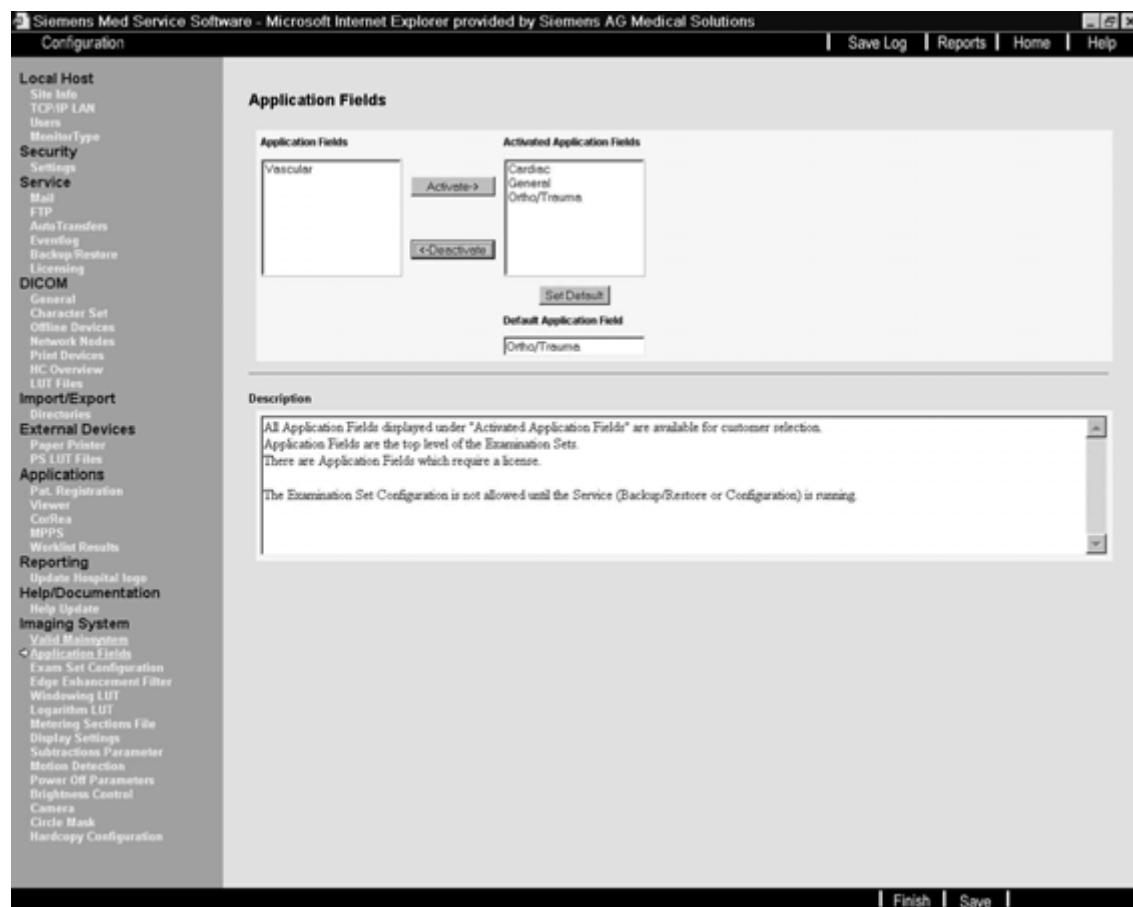


Fig. 48: Config_ImagingSystem_ApplicationsFields

- The default application field requested by the customer must be activated with "Set default".
 - To select an application field as the default application field, it must be displayed under "Activated application fields".
- To activate an application field, it must be selected under "Application fields" and then activated by pressing the "Activate" button.
 - There are "Application Fields" that require a license.
- Select "Save".

Examination Set Configuration

The minimum and maximum filters and LUTs for each examination set can be defined here to the customer's request.

- Select "Examination set configuration".

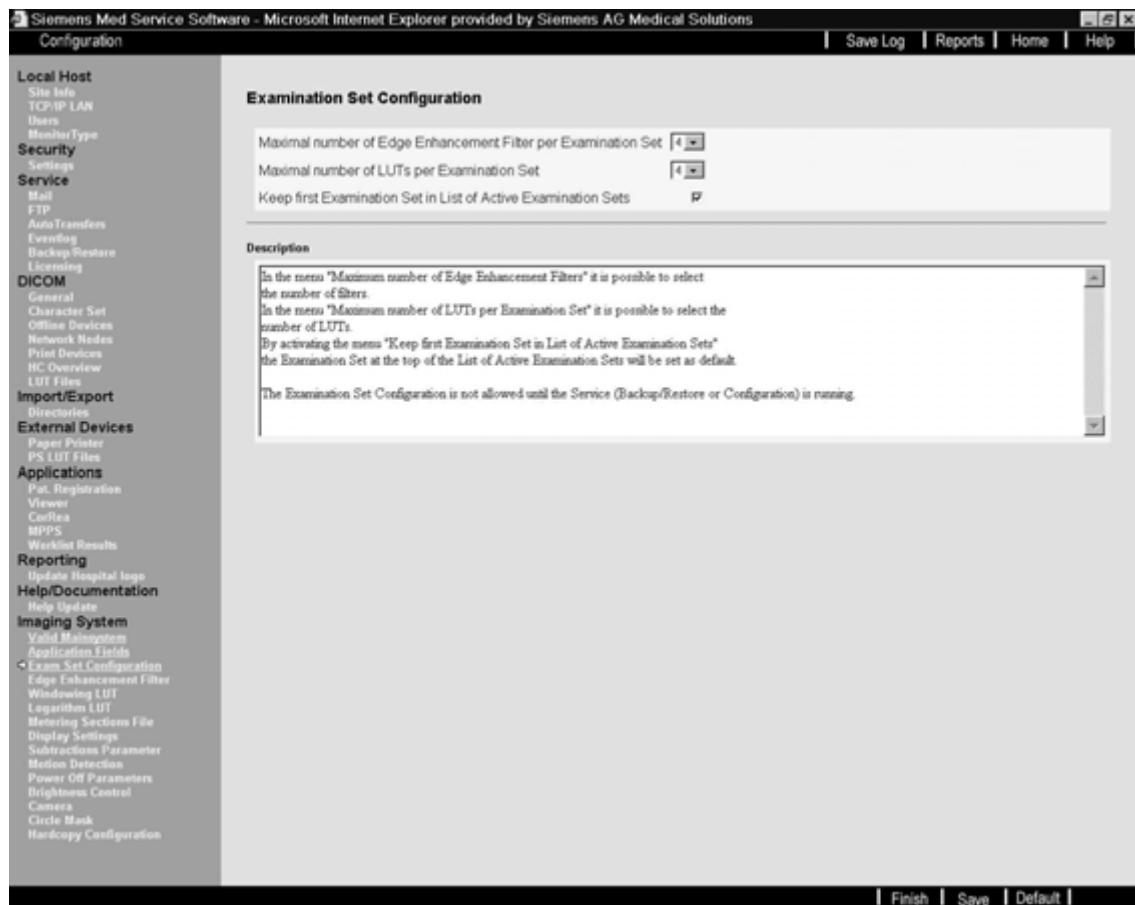


Fig. 49: Config_ImagingSystem_ExaminationSetConfiguration

- Under "Maximum number of Edge Enhancement Filters per Examination Set", check whether "4" is selected.
- Under "Maximum number of LUTs per Examination Set", check whether "4" is selected.
- Select "Keep first Examination Set in List of Active Examination sets".
 - By selecting "Keep first Examination Set in List of Active Examination sets", the first examination set in the active examination set list becomes the default.

Edge Enhancement Filters

The edge enhancement filters are responsible for edge enhancement.

- Select "Import edge enhancement filters".

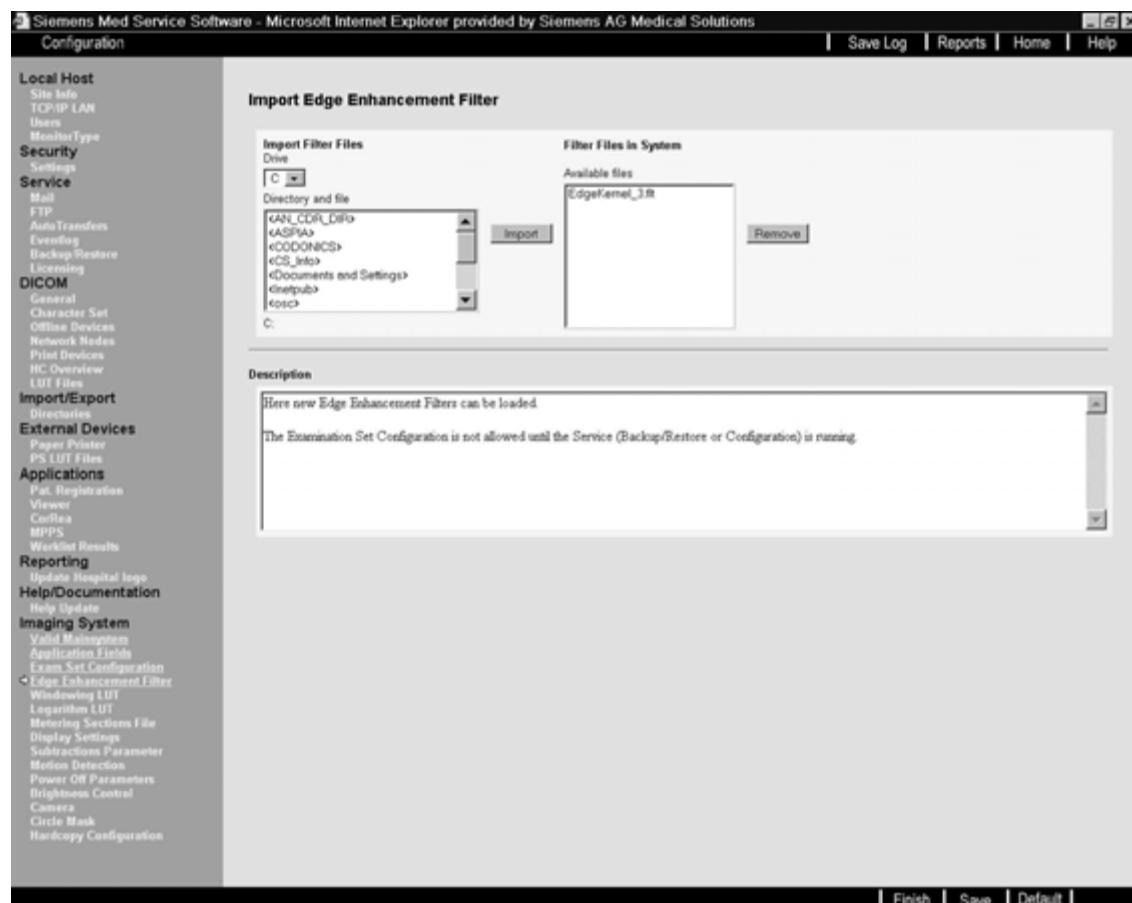


Fig. 50: Config_ImagingSystem_EdgeEnhancementFilter

- Press the "Next" button for an initial installation.

Importing edge enhancement filters

If an "edge enhancement filter" is imported, proceed as follows:

- Select the required drive under "Drive".
- Select the required file in "Directory and file".
- Click "Import".
 - ⇒ The file will be displayed under "Available files".
- Press the "Save" button.

Windowing LUT

- Select "Import windowing LUT".

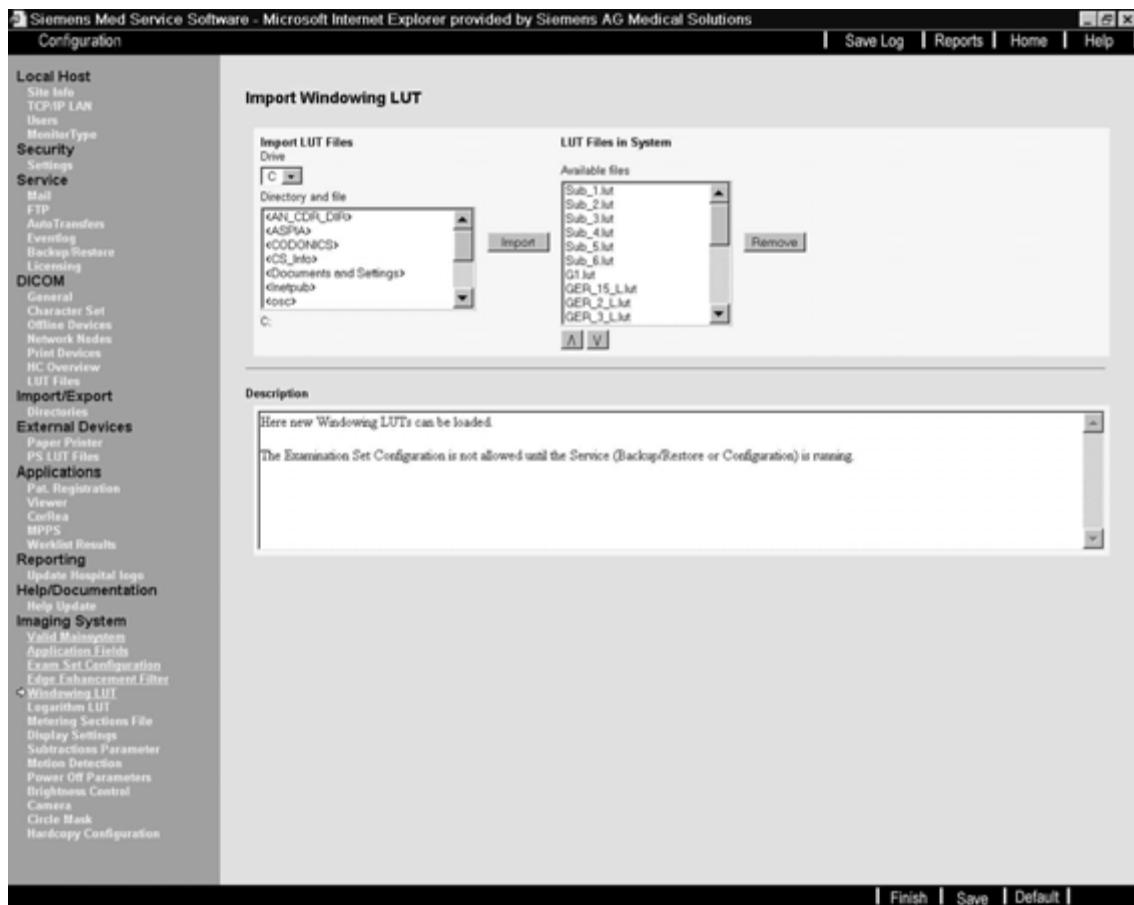


Fig. 51: Config_ImagingSystem_WindowingLUT

- Press the "Next" button for an initial installation.

Importing windowing LUT

If a windowing LUT is imported, proceed as follows:

- Select the required drive under "Drive".
- Select the required file in "Directory and file".
- Click "Import".
 - ⇒ The file will be displayed under "Available files".
- Press the "Save" button.

Import and Activate Logarithm LUT

- Select "Import and activate logarithm LUTs"

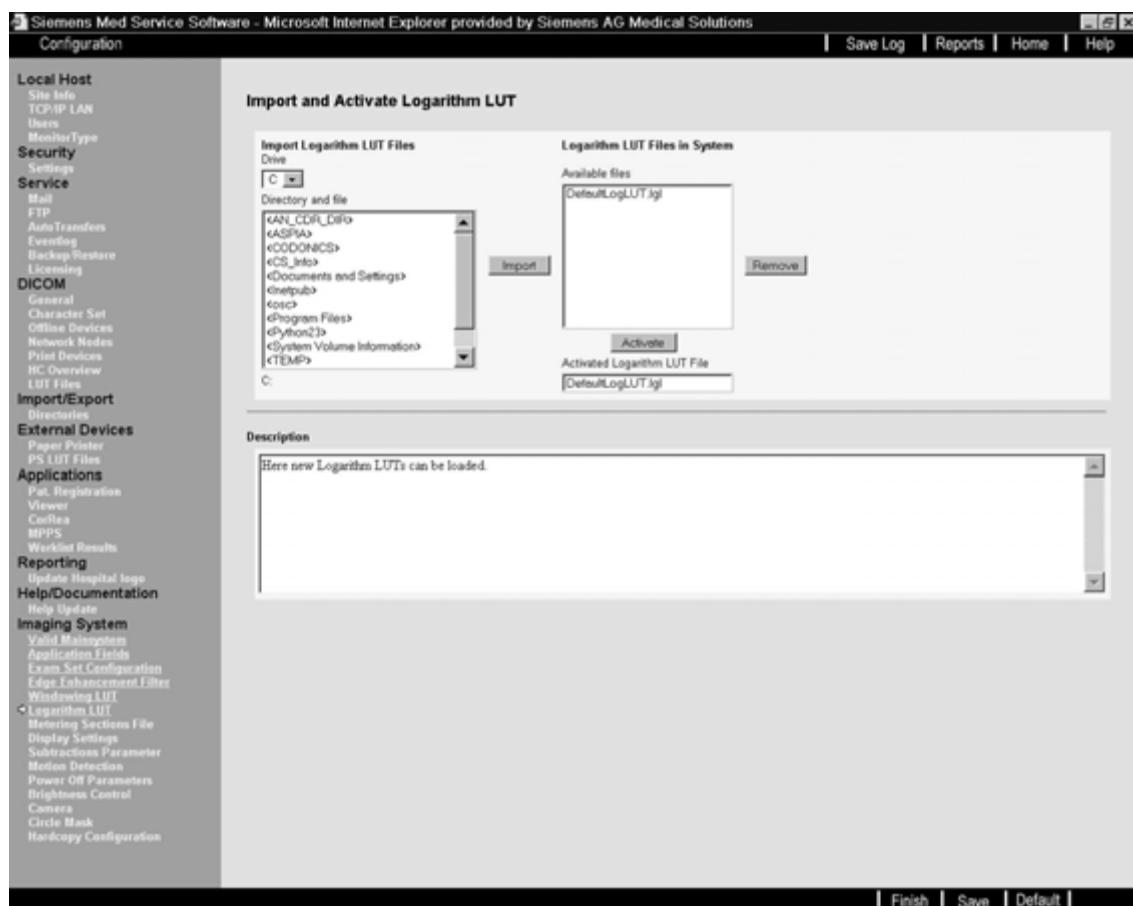


Fig. 52: Config_ImagingSystem_LogarithmLUT

- Press the "Next" button for an initial installation.

If a logarithm LUT is imported, proceed as follows:

- Select the required drive under "Drive".
- Select the required file in "Directory and file".
- Click "Import".
 - ⇒ The file will be displayed under "Available files".
- Press the "Save" button.

If a logarithm LUT is activated, proceed as follows:

- Select the required file under "Available files".
- Click on "Activate".
 - ⇒ The file will be displayed under "Activated logarithm LUT file".

- Press the "Save" button.

If a logarithm LUT is to be removed, proceed as follows:

- Select the required file under "Available files".
- Click on "Remove".
⇒ The file will be removed under "Activated logarithm LUT file".
- Press the "Save" button.

NOTE

A file must always be entered under "Activated logarithm LUT file".

Metering Sections File

- Select "Metering Sections File".

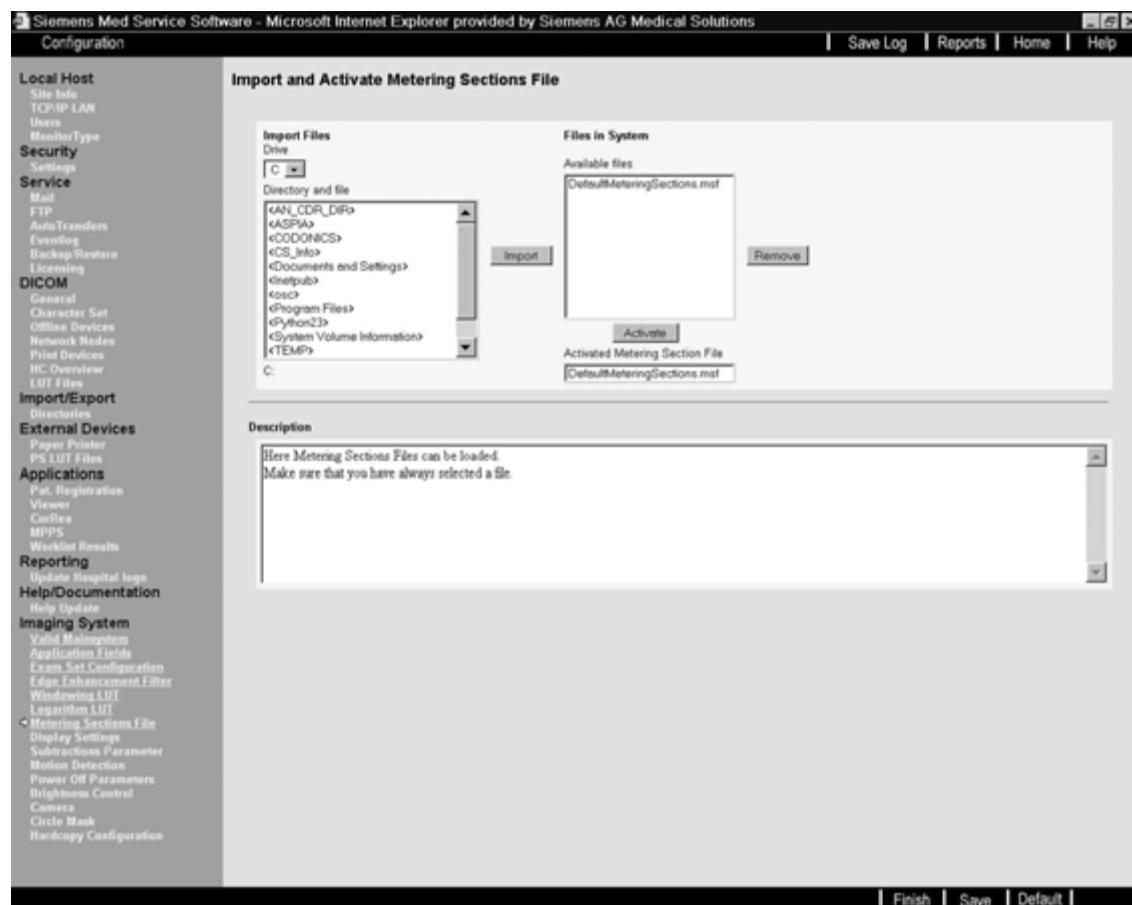


Fig. 53: Config_ImagingSystem_MeteringSectionsFile

- Press the "Next" button for an initial installation.

To import a metering section file, proceed as follows:

- Select the required drive under "Drive".
- Select the required file in "Directory and file".
- Click "Import".
 - ⇒ The file will be displayed under "Available files".
- Press the "Save" button.

For activating a metering section file, proceed as follows:

- Select the required file under "Available files".
- Click on "Activate".
 - ⇒ The file will be displayed under "Activated metering section file".
- Press the "Save" button.

If a metering section file is to be removed, proceed as follows:

- Select the required file under "Available files".
- Click on "Remove".
 - ⇒ The file will be removed under "Activated metering section file".
- Press the "Save" button.

NOTE

A file must always be entered under "Activated Metering Section file".

Display Settings

- Select "Display settings".

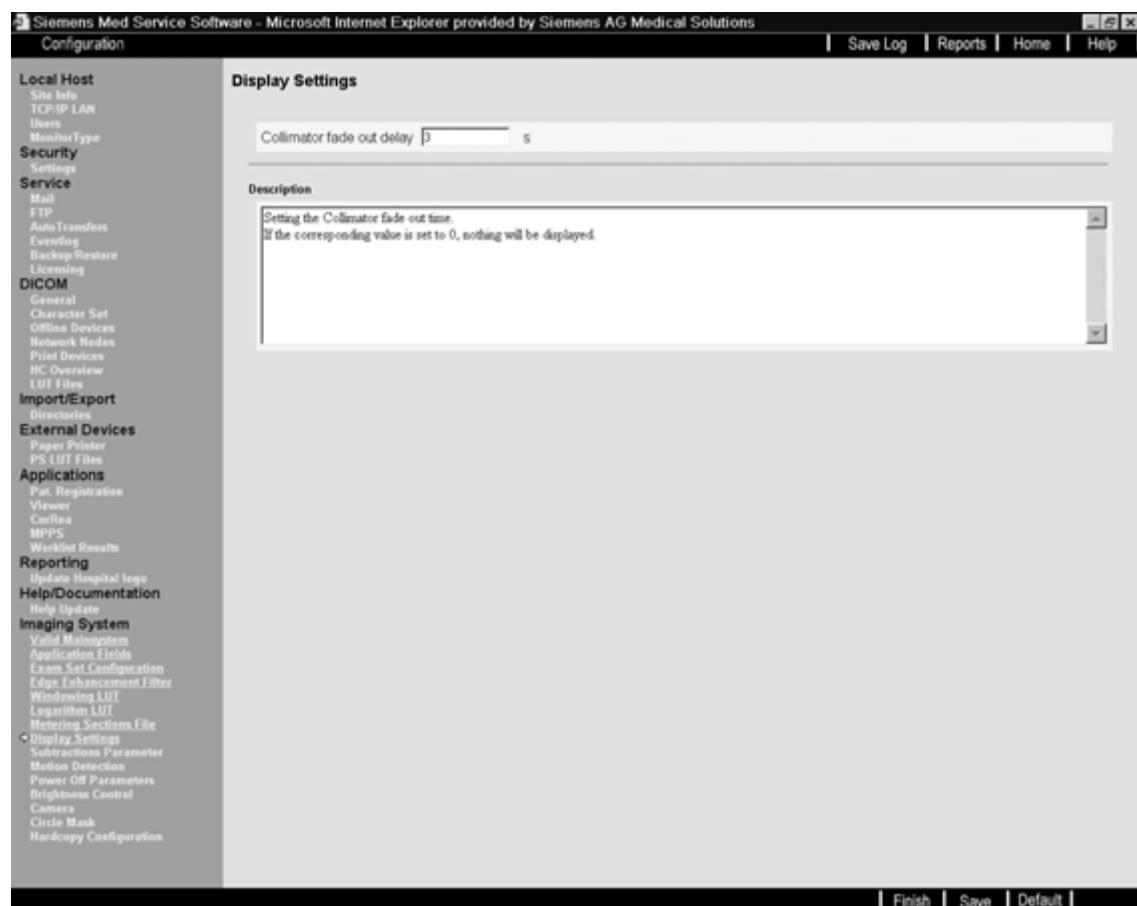


Fig. 54: Config_ImagingSystem_DisplaySettings

- Check whether "3" is displayed under "Collimator fade out delay".
- If no changes were made, select "Next".
- If changes were made, select "Save" and "Next".

Subtraction Parameters

The minimum and maximum values for noise suppression for the individual phases are set here.

- Select "Subtraction parameters".

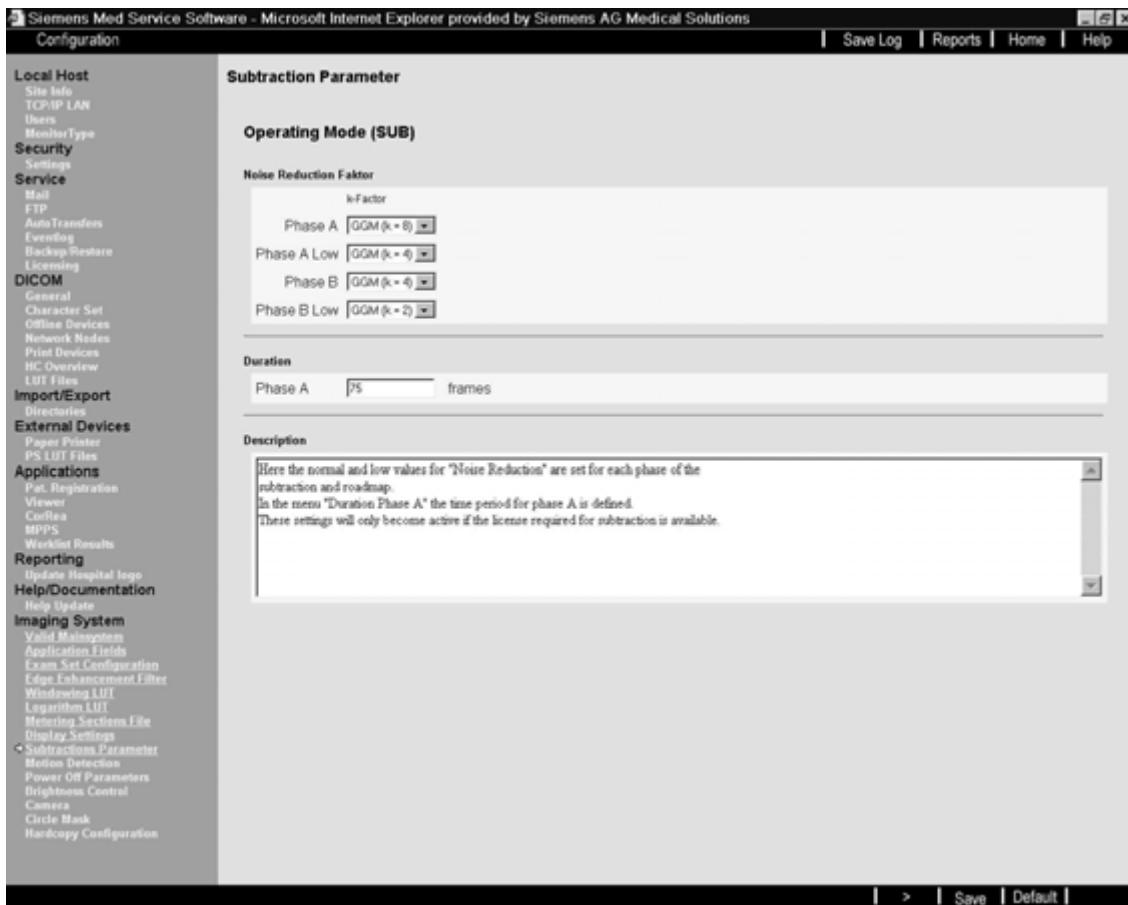


Fig. 55: Config_ImagingSystem_SubtractionParameter_1

Operating Mode (SUB)

Initial installation

Noise reduction factor

- Verify that k factor "GGM (k= 8)" is set under Phase A.
- Verify that k factor "GGM (k=8)" is set under Phase A Low.
- Verify that k factor "GGM (k=8)" is set under Phase B.
- Verify that k factor "GGM (k=4)" is set under Phase B Low.

Duration

- Verify that "75" frames are set under Phase A.
- Select "Save".

Roadmap operating mode

- Select ">".

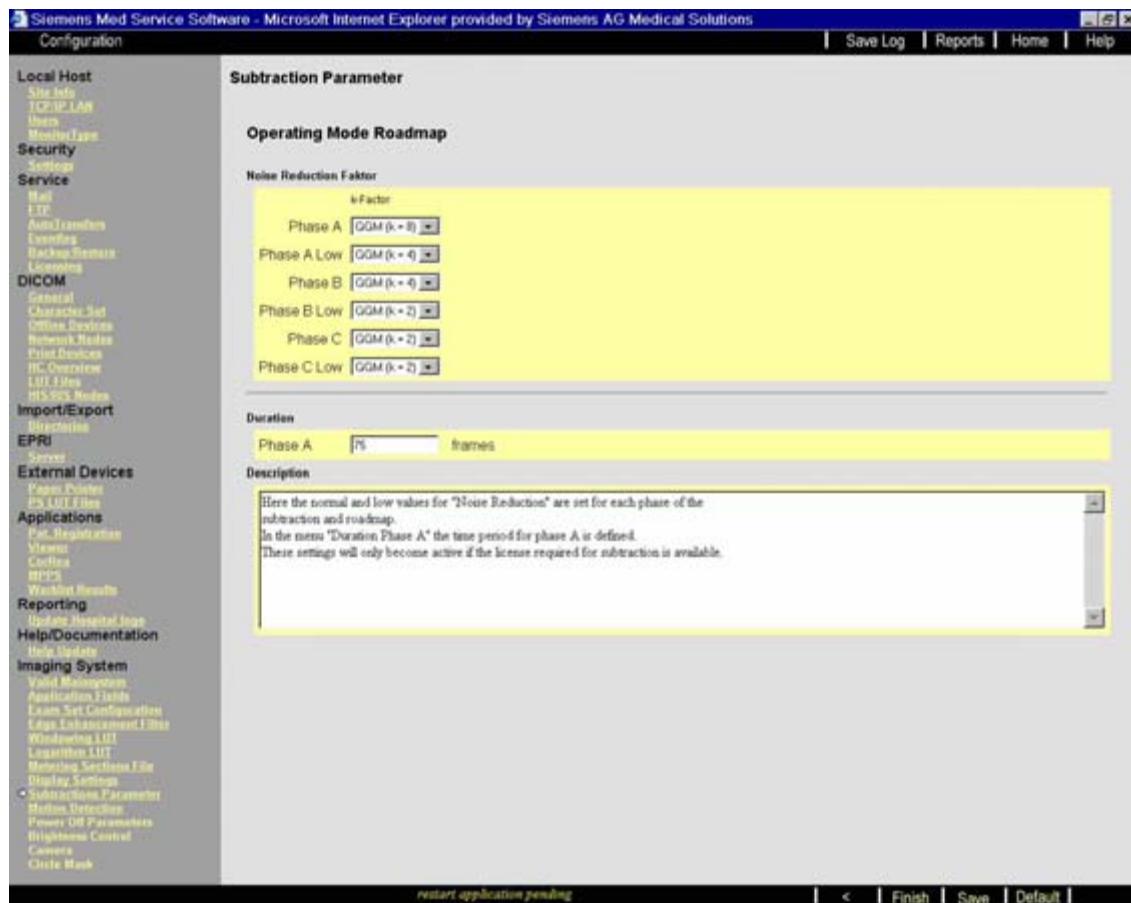


Fig. 56: Imaging System_Subtractions Parameter_2

Initial installation

Noise reduction factor

- Verify that k factor "GGM (k= 8)" is set under Phase A.
- Verify that k factor "GGM (k=8)" is set under Phase A Low.
- Verify that k factor "GGM (k=8)" is set under Phase B.
- Verify that k factor "GGM (k=4)" is set under Phase B Low.
- Verify that the k factor "GGM (k=4)" is set under Phase C.
- Verify that the k factor "GGM (k=2)" is set under Phase C Low.

Duration

- Verify that "75" frames are set under Phase A.
- Select "Save".

Motion Detection

- Select "Motion detection".

MD1 parameters

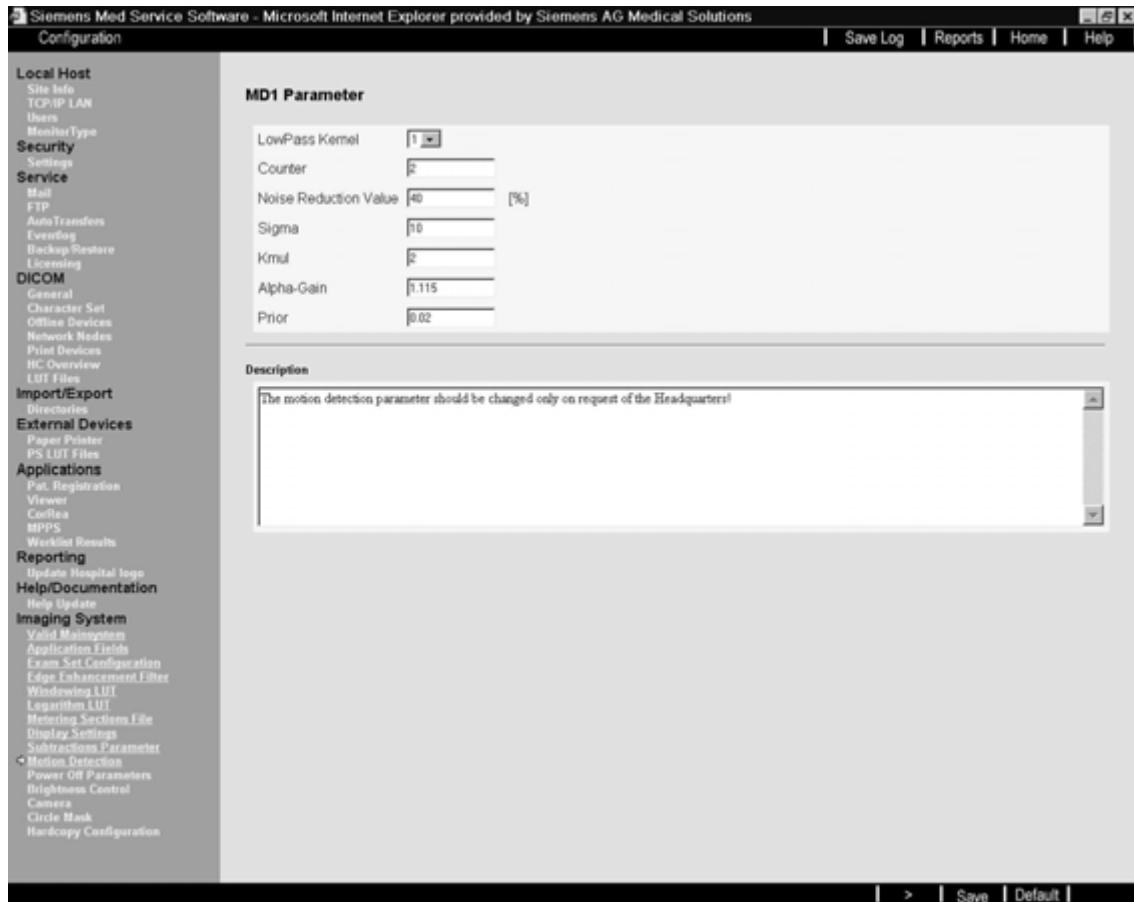


Fig. 57: Config_ImagingSystem_MotionDetection_1

LowPass kernel

- Check whether "1" is selected.

Counter

- Check whether "2" is selected.

Noise reduction value

- Check whether "40" is selected.

Sigma

- Check whether "10" is selected.

Kmul

- Check whether "2" is selected.

Alpha gain

- Check whether "1.115" is selected.

Prior

- Check whether "0.02" is selected.
- Click on ">".

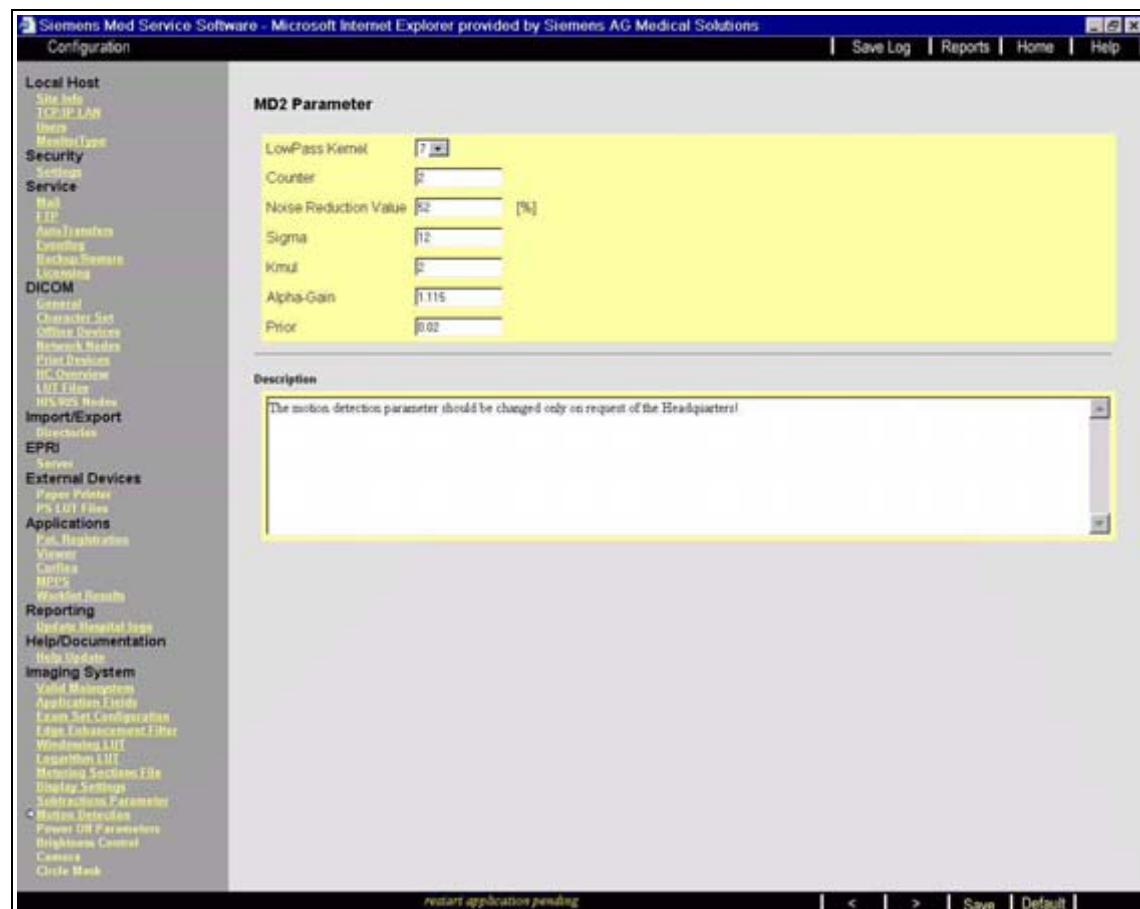
MD2 parameters

Fig. 58: Configuration_ImagingSystem_MotionDetection2

LowPass kernel

- Check whether "1" is selected.

Counter

- Check whether "2" is selected.

Noise reduction value

- Check whether "52" is selected.

Sigma

- Check whether "10" is selected.

Kmul

- Check whether "2" is selected.

Alpha gain

- Check whether "1.115" is selected.

Prior

- Check whether "0.02" is selected.
- Click on ">".

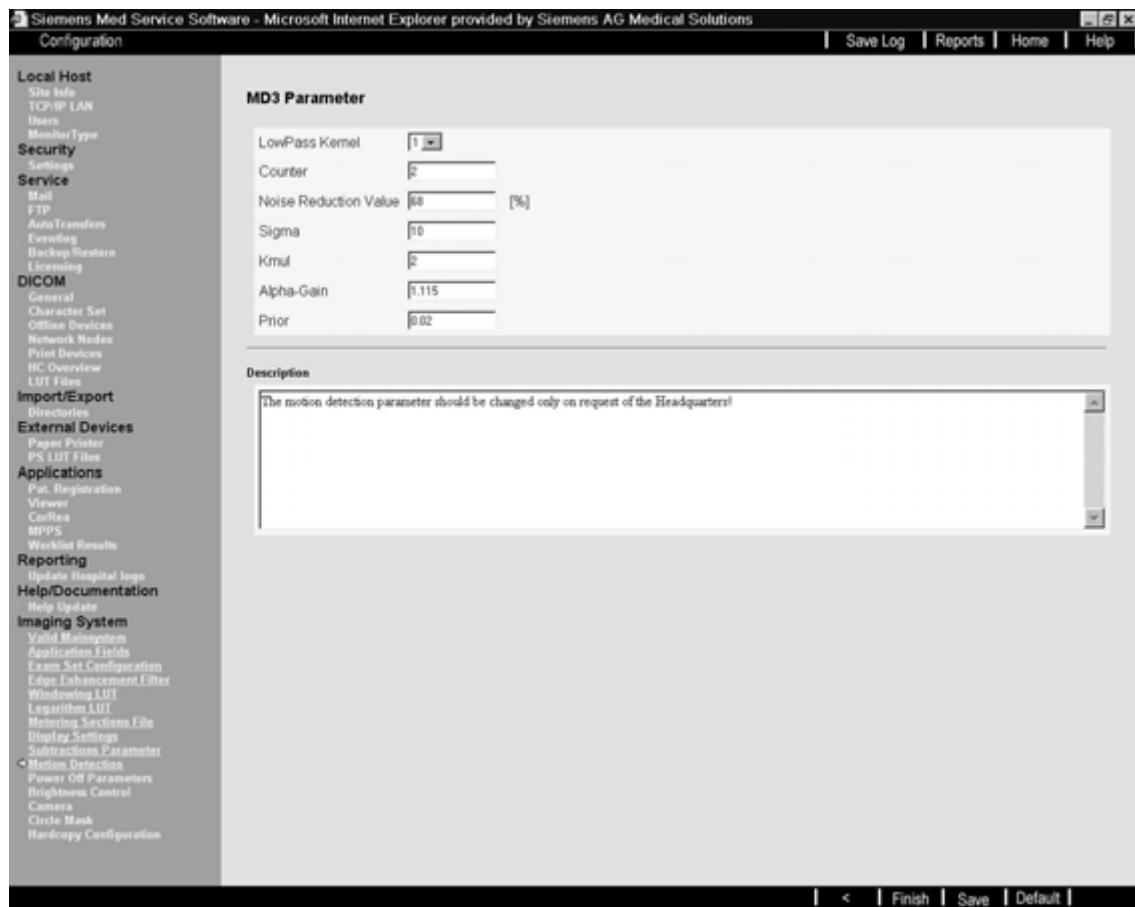
MD3 parameters

Fig. 59: Config_ImagingSystem_MotionDetection_3

LowPass kernel

- Check whether "1" is selected.

Counter

- Check whether "2" is selected.

Noise reduction value

- Check whether "68" is selected.

Sigma

- Check whether "10" is selected.

Kmul

- Check whether "2" is selected.

Alpha gain

- Check whether "1.115" is selected.

Prior

- Check whether "0.02" is selected.

Power Off Parameters

The time period during which the main system can be switched on again without also switching on the image system is defined under "Power off grace period".

- Select "Power off parameters".

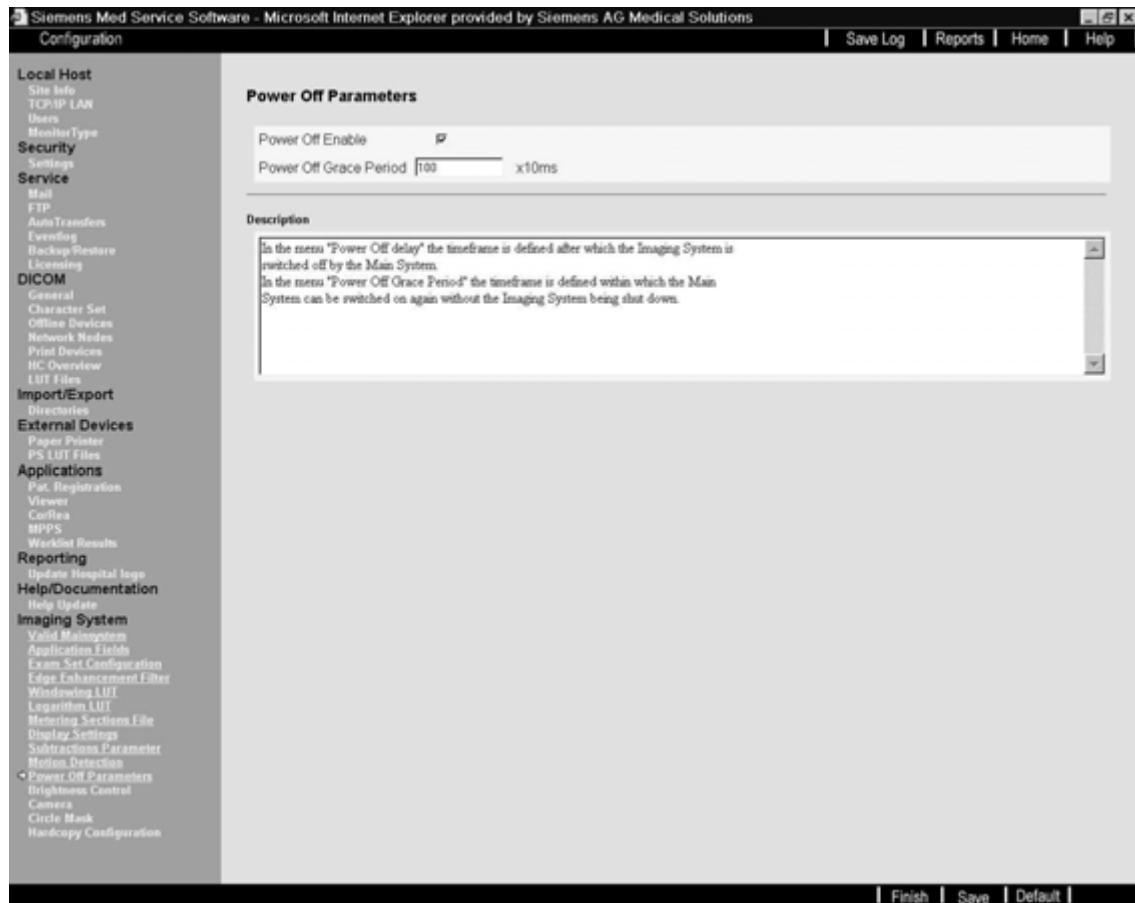


Fig. 60: Config_ImagingSystem_PowerOffParameters

- Power off enable, check whether "Power off enable" is selected.
 - For service purposes, "Power off enable" can be deselected.
- Under Power Off Grace Period, verify that "1500" x 10ms is set.

Brightness Control

This is where the actual brightness value for brightness control of the imaging system is set.

- Select "Brightness control".

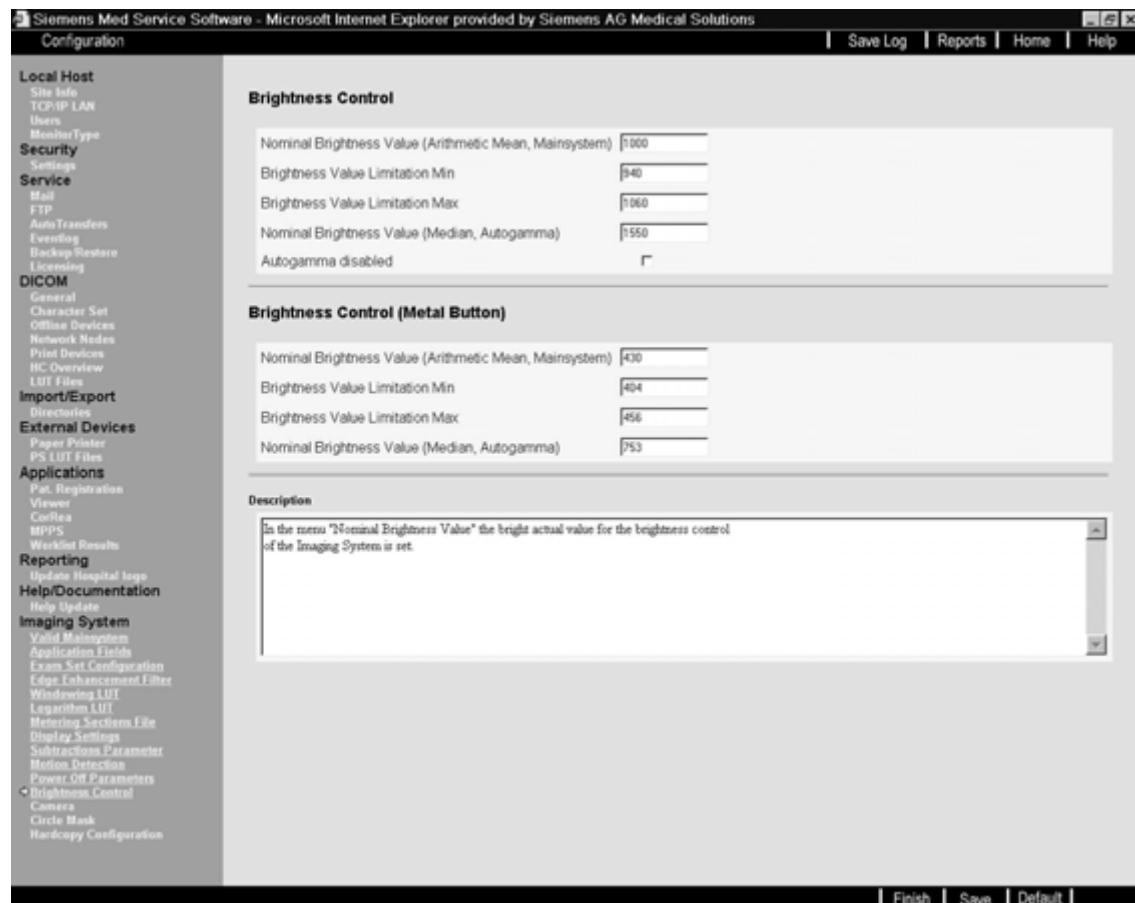


Fig. 61: Config_ImagingSystem_BrightnessControl

Brightness control

- Verify that the value "1000" is set under Nominal Brightness Value.
- Verify that the value "940" is set under Nominal Brightness Value Limitation Min.
- Verify that the value "1060" is set under Nominal Brightness Value Limitation Max.
- Under Nominal Brightness Value (Median, Autogamma), verify that the value "1550" is set.
- Under Autogamma disabled, make sure the item is not marked.
 - This item is automatically reset to "not marked" when the service software closes.

Brightness Control (Metal Button)

- Verify that the value "430" is set under Nominal Brightness Value.
- Verify that the value "404" is set under Nominal Brightness Value Limitation Min.
- Verify that the value "456" is set under Nominal Brightness Value Limitation Max.
- Under Nominal Brightness Value (Median, Autogamma), verify that the value "753" is set.

Autogamma Disabled

- Do not select "Autogamma disabled".
 - "Autogamma disabled" should be selected only for service purposes.
- "Autogamma disabled" is reset by closing the service software.
- Click on "Next".

Camera

The parameters required for the individual operating modes are set here.
These should be changed only when instructed by the home office.

- Select "Camera".



Fig. 62: Config_ImagingSystem_CameraGain

- Under "DR single", check whether the value "1" is set.
- Under "DR single sum", check whether the value "2" is set.
- Under "DR series", check whether the value "2" is set.
- Under "DR series sum", check whether the value "2" is set.
- Under "CFC", check whether the value "2" is set.
- Under "PFC IDL", check whether the value "2" is set.
- Under "PFC PDL", check whether the value "2" is set.
- Under "DCM", check whether the value "1" is set.

Circle Mask

- Select "Circle mask".

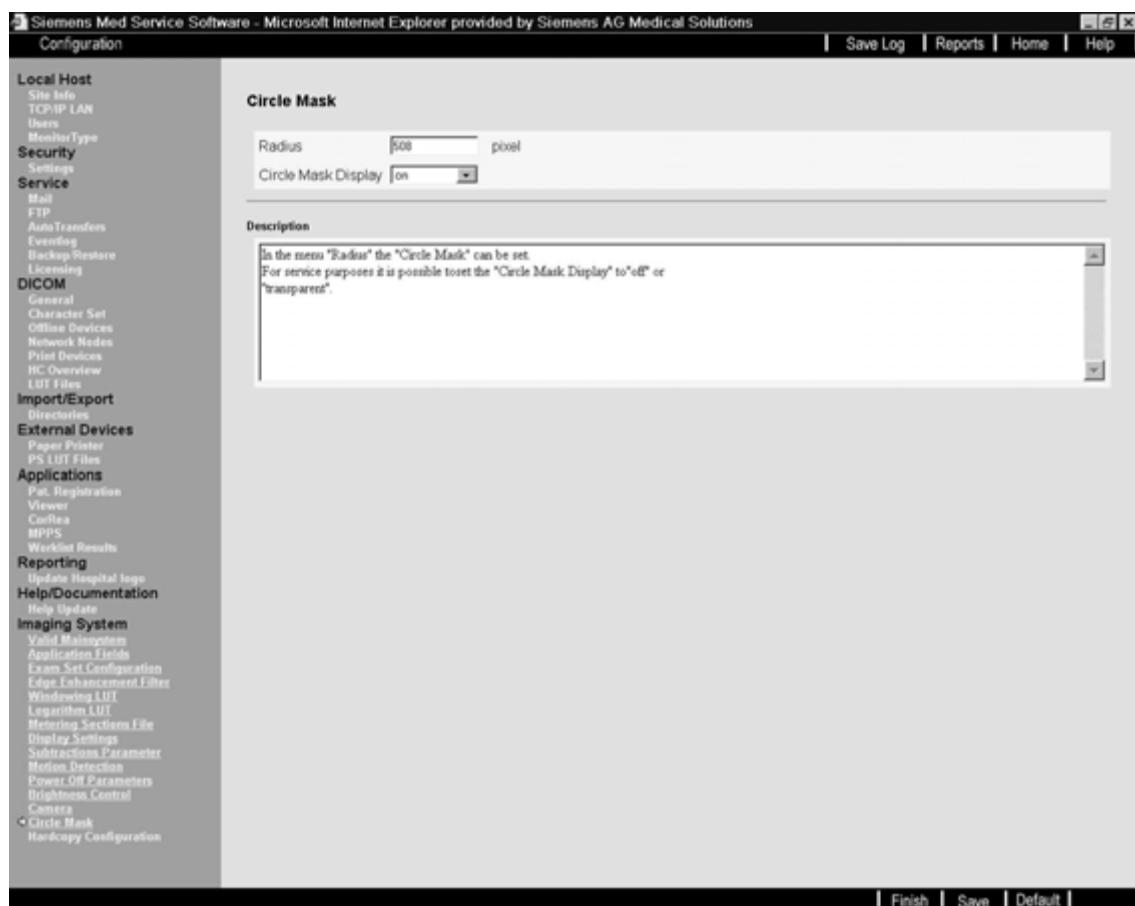


Fig. 63: Config_ImagingSystem_CircleMask

- Under "Radius", check whether the value "508" is set.
- Under "Circle Mask Display", check whether "on" is selected.
 - A switch to "transparent" can be made for service purposes.
- Click "Finish".

Hardcopy Configuration

- Select "Hardcopy Configuration".
 - With this option one can set the action of the HardCopy button on the tableside control of the basic unit: it can be set either to send the print order directly to the local printer or spool it first in the Filming task card.

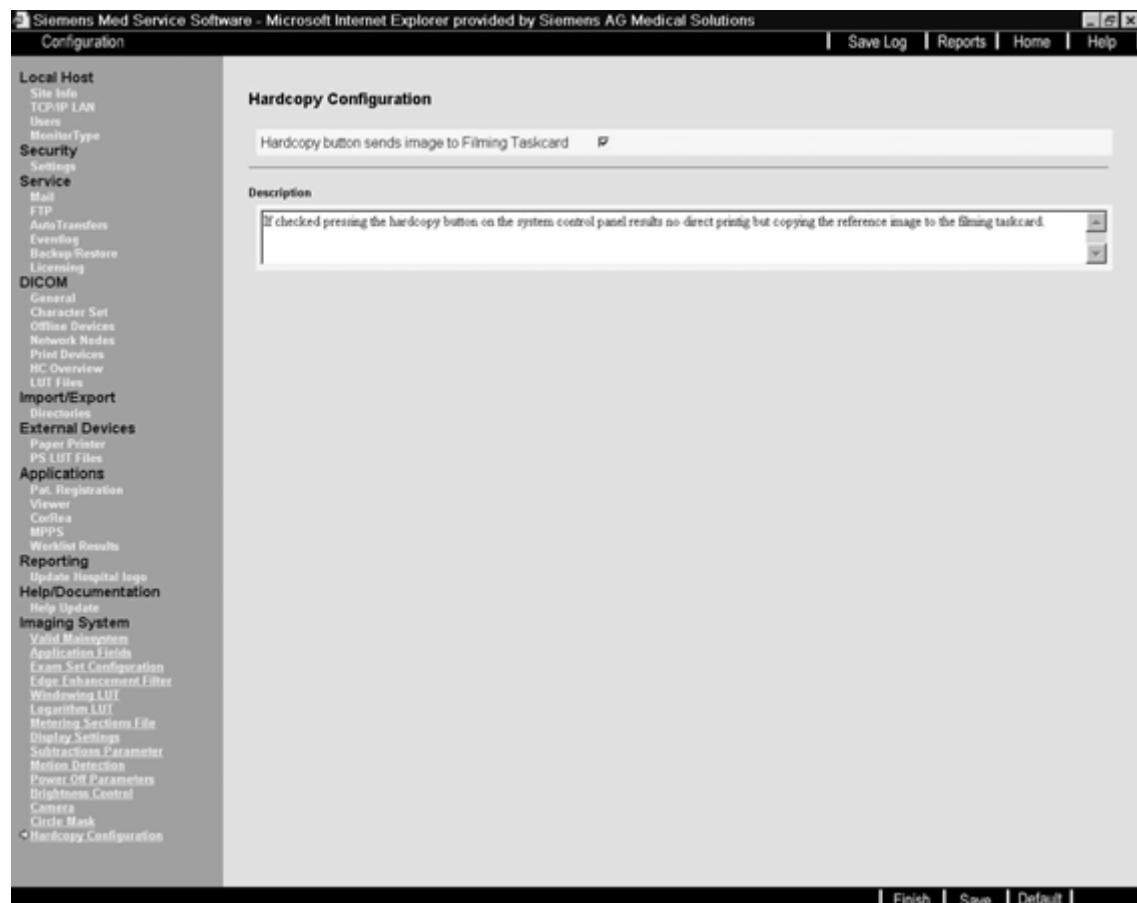


Fig. 64: Config_ImagingSystem_HardcopyConfiguration

- Check whether "Hardcopy button sends image to Filming task card" is marked.
- Click "Finish".

Initial configuration

The following window appears after an initial installation of the imaging system software and configuration:

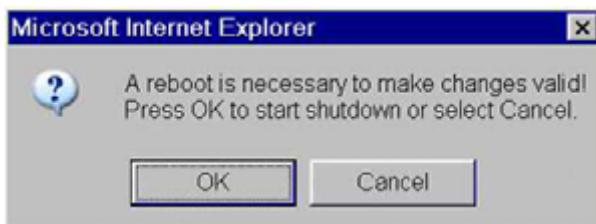


Fig. 65: *Restore_reboot*

- Click "OK".

NOTE

**The system restarts and
the exchange database is created.
(Takes approx. 10 minutes).**

**The system should not be switched off while the exchange data-
base is being created.**

- ⇒ A window with the following text is displayed:
Warning: database creation in progress. This will last a long time. Wait until the patient registration dialog is open! Press OK to close this message box!
- ⇒ The display of the patient registration dialog signifies the conclusion of the creation of the exchange database.

NOTE

This concludes configuration of the imaging system.

NOTE

- Steps to be performed are preceded by a bullet point.
 - Indented text under the activity to be performed contains general information.
 - ⇒ Results and events are preceded by an arrow.

NOTE

In the main system service pages, you must press the "Enter" key after entering a parameter.

When this is done, the "Save" button is displayed.

NOTE

Once the "Save" button has been selected in the individual screens, the message "..... successfully saved" appears following a successful save. Please:



- Select "OK".

NOTE

Depending on the progress of the configuration, the "Next" button can also be displayed as the "Finish" button.

Download**C-Arm**

This point is described in the document "Software Installation".

Configuration

Main System

- Select "Main system".

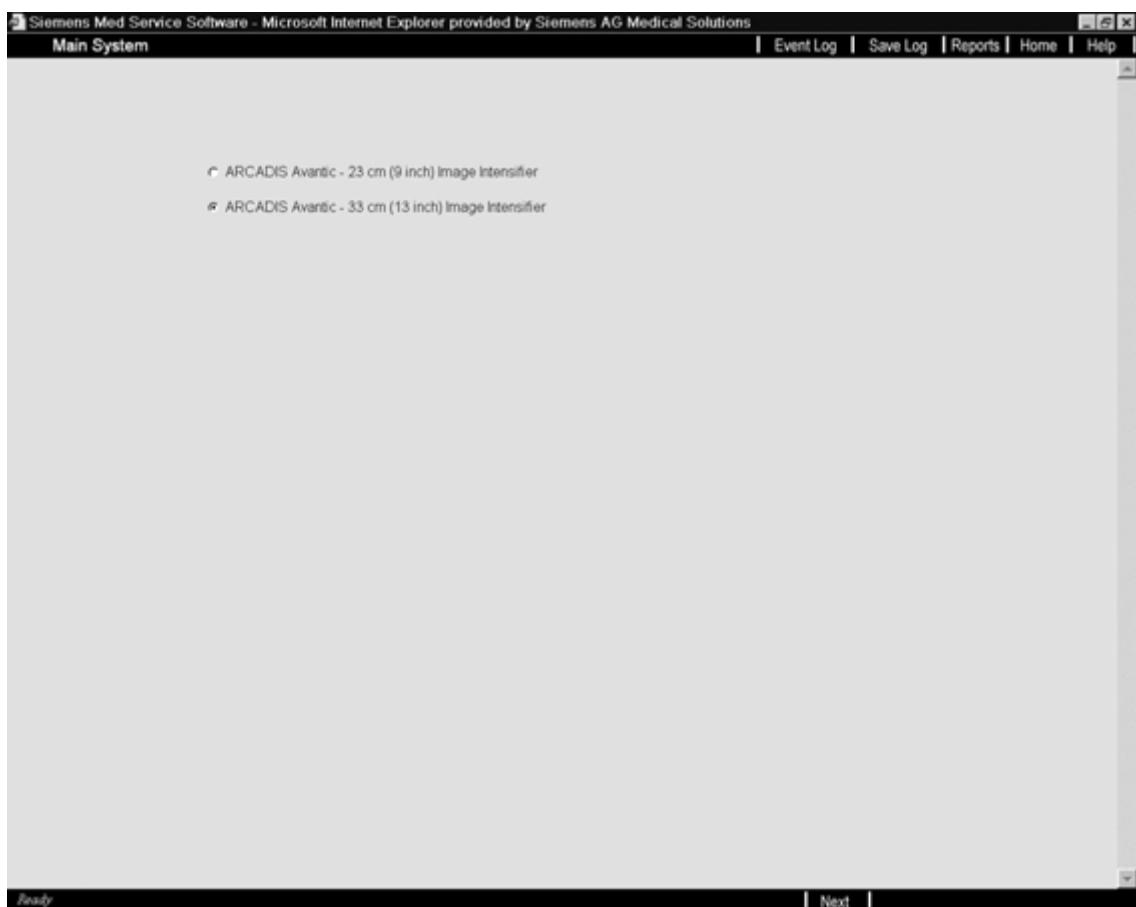


Fig. 66: MainSystem_ImageIntensifier

- Select “ARCADIS Avantic -33cm (13 inch) Image Intensifier” .
 - The “23 cm (9 inch) Image Intensifier” is not released for this application.

NOTE

If 2D navigation is connected to the system, 2D configuration should be carried out following the main system configuration according to the document “ARCADIS System 2DNavigation SPR2-310.814.02.xx.xx.” .

- Click "Next".
⇒ The following text is displayed: Don't unplug the device during the service session. Leave this session only with the <home> button to avoid improper state of the device.
- Select "Main system".

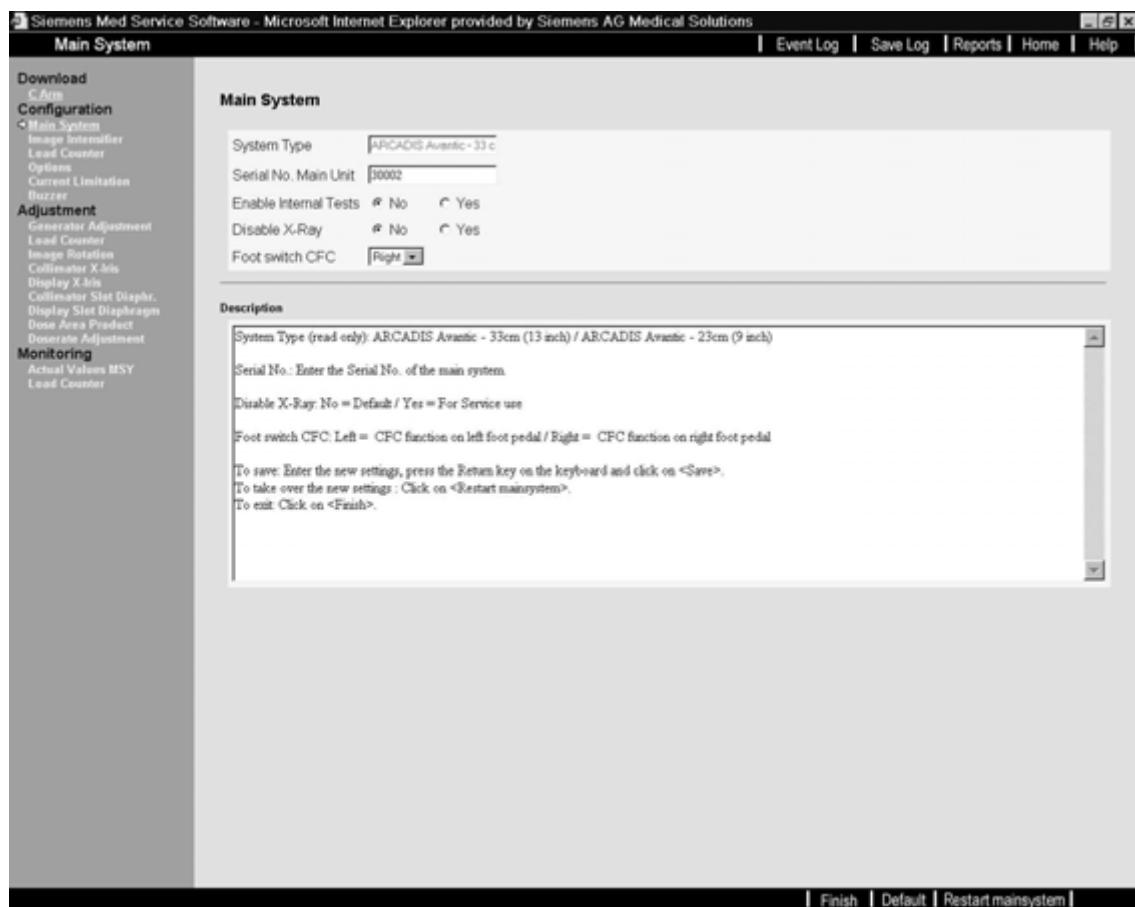


Fig. 67: MainSystem_Configuration_MainSystem

System type

- Check to make sure that the correct system type is displayed here.
- The selection is made after selecting the main system in the service software.

Serial no.

- Enter the serial number of the "Main System" here.

Enable internal tests

- Check that "no" is selected.
- "Yes" is required only by the Engineering Department.

X-ray disable

- Check that "no" is selected.

Foot switch CFC

- Select "Right" or "Left", depending upon whether the CFC should be released by the right or left foot pedal.

Image Intensifier

- Select "Image Intensifier".

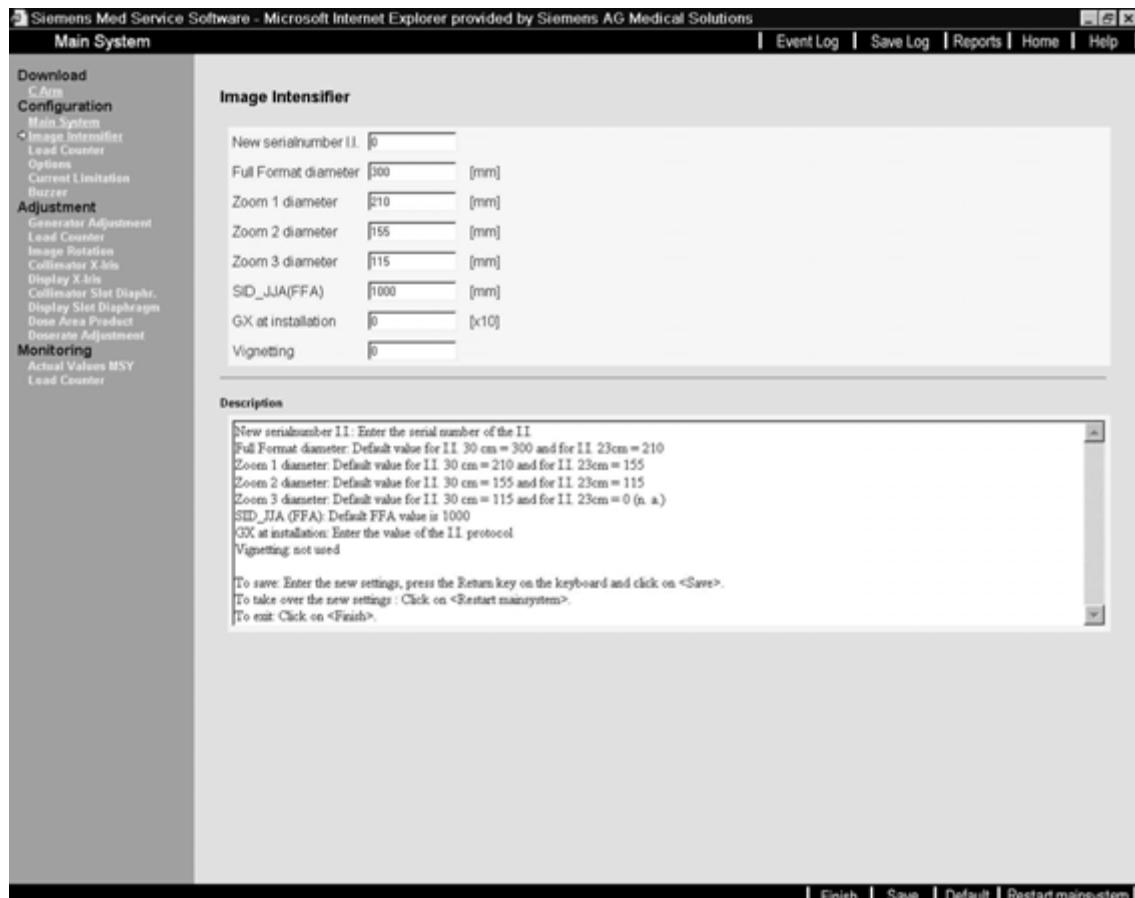


Fig. 68: MainSystem_Configuration_ImageIntensifier

New serial number I.I.

- Enter the serial number of the I.I.
 - This can be found on the I.I housing.

Full format diameter

- Check whether the value "300" is set.

Zoom 1 diameter

- Check whether the value "215" is set.

Zoom 2 diameter

- Check whether the value "160" is set.

Zoom 3 diameter

- Check whether the value "120" is set.

SID_JJA (FFA)

- Check whether the value "1000" is set.

GX at installation

- This value is taken from the I.I. protocol during the initial installation of the image intensifier.

Vignetting

- Check whether the value "0" is set.

Load Counter

Load counter

- Select "Load Counter".

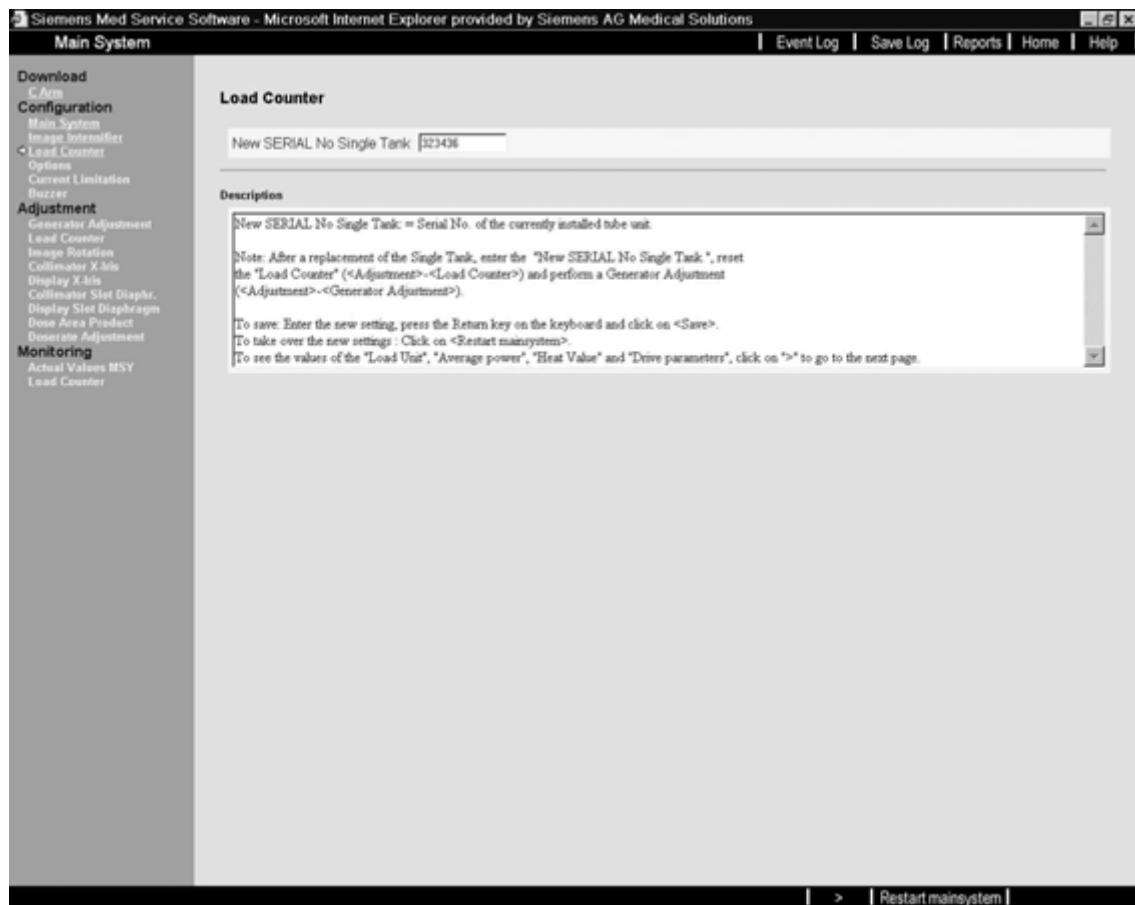


Fig. 69: MainSystem_Configuration_LoadCounter_1

New serial no. single tank

- Enter the serial number of the "Single Tank".
 - This can be found on the "Single Tank" housing.
- Click ">".

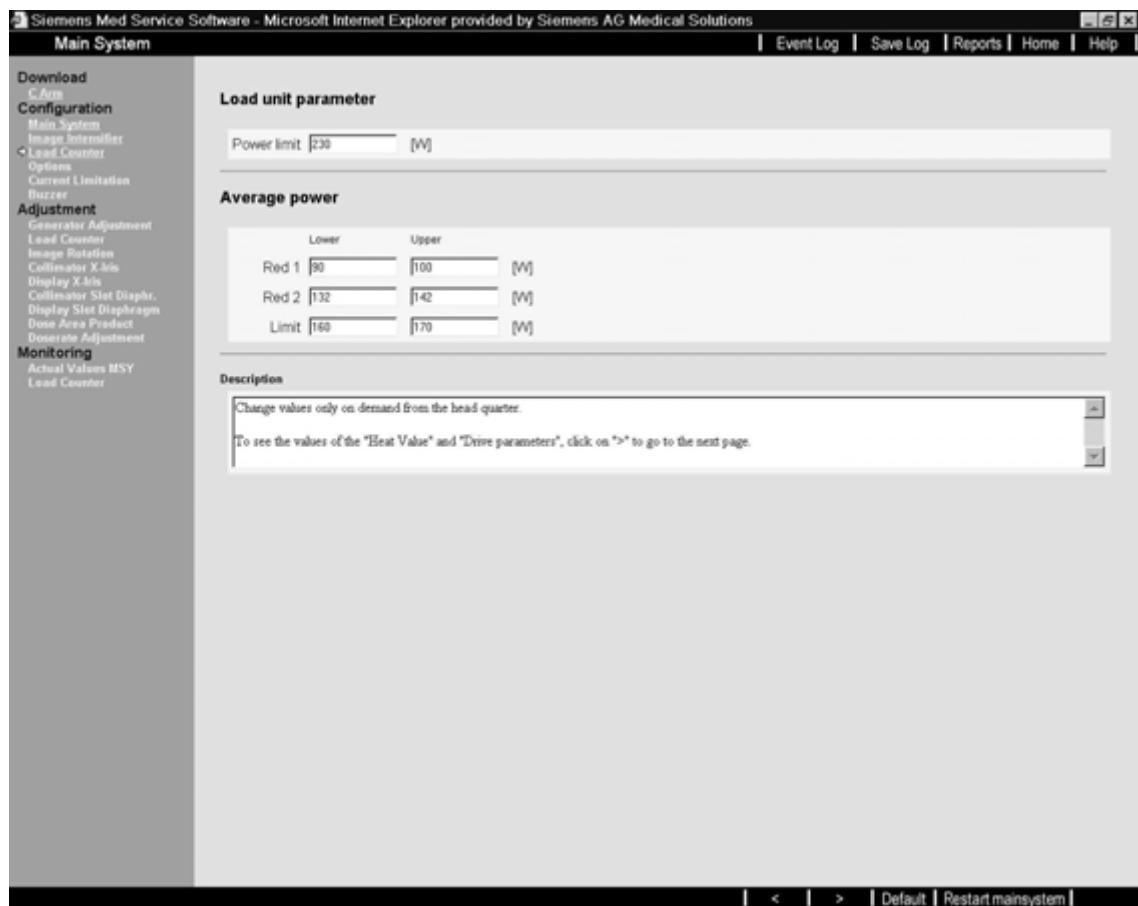


Fig. 70: MainSystem_Configuration_LoadCounter_2

Load unit parameters

Power limit

- Check whether the value "230" is set.

Average power

Red 1

- Check whether under "Lower", the value "120" is set.
- Check whether under "Upper", the value "130" is set.

Red 2

- Check whether under "Lower", the value "140" is set.
- Check whether under "Upper", the value "150" is set.

Limit

- Check whether under "Lower", the value "165" is set.
- Check whether under "Upper", the value "175" is set.

- Click ">".

Heat value

	Lower	Upper	
Red 1	14000	14500	[Joule x 10]
Red 2	15500	16000	[Joule x 10]
Limit	17000	18000	[Joule x 10]

Description

Change values only on demand from the head quarter.
To see the values of the "Drive parameters", click on ">" to go to the next page.

Fig. 71: MainSystem_Configuration_LoadCounter_3

Red 1

- Check whether under "Lower", the value "14000" is set.
- Check whether under "Upper", the value "14500" is set.

Red 2

- Check whether under "Lower", the value "15500" is set.
- Check whether under "Upper", the value "16000" is set.

Limit

- Check whether under "Lower", the value "17000" is set.
- Check whether under "Upper", the value "18000" is set.
- Click ">".

Drive parameters

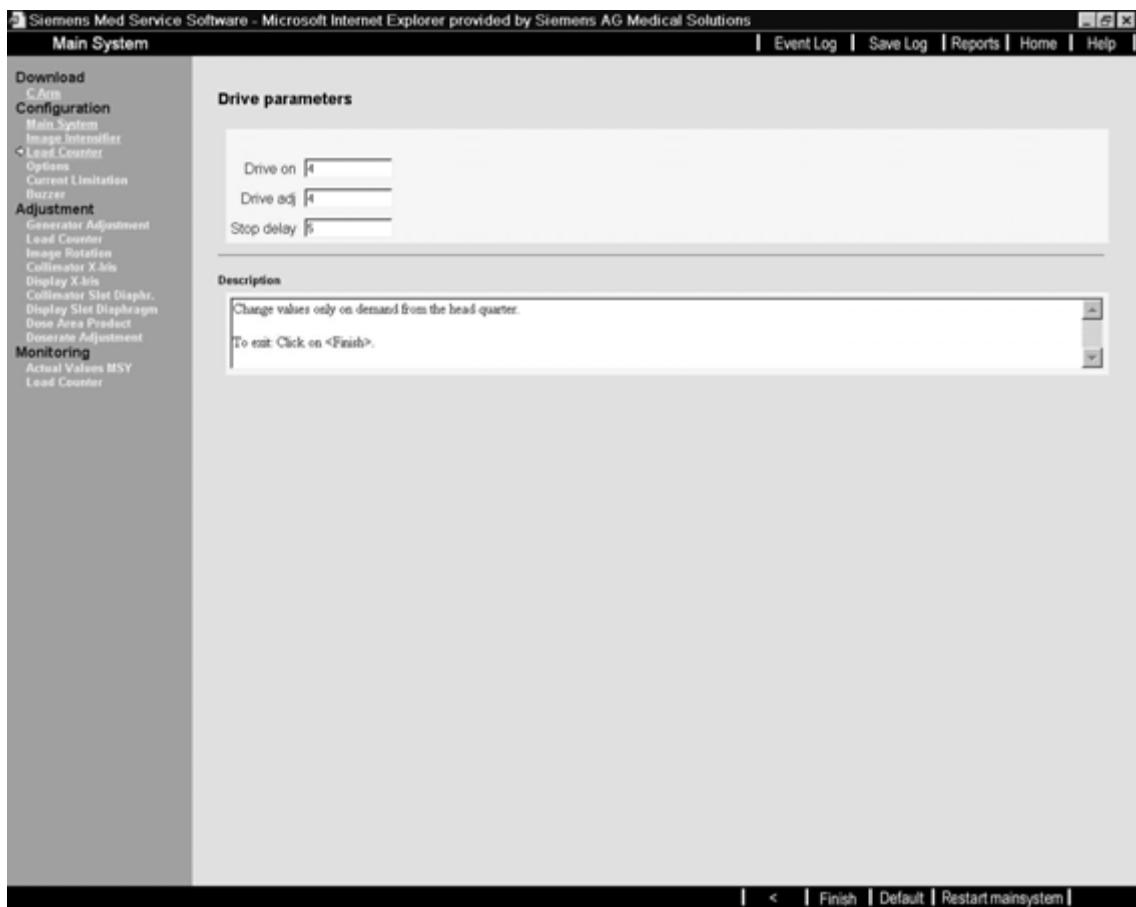


Fig. 72: MainSystem_Configuration_LoadCounter_4

Drive on

- Check whether the value "4" is set.

Drive adj.

- Check whether the value "4" is set.

Stop delay

- Check whether the value "5" is set.

Options

- Select "Options".

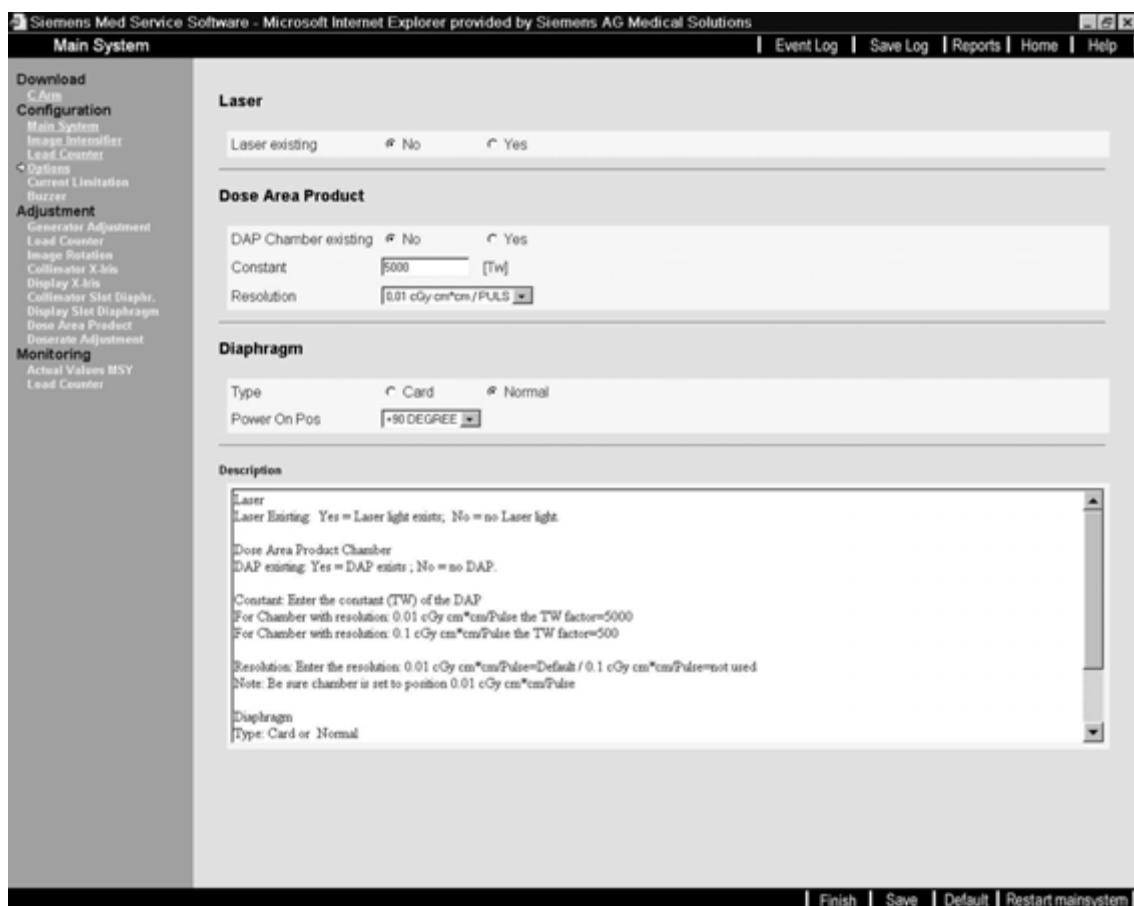


Fig. 73: MainSystem_Configuration_Options

Laser

Laser existing

- If a laser is configured, select "yes".

Dose Area Product

DAP chamber present

- If a Dose Area Product chamber is present, select "yes".

Constant

- This value must be checked during installation of the new Diamentor and, if needed, adapted. As a default, "5000" is set.

Resolution

- Check that "0 .01cGy cm*cm/Puls" is selected.

Diaphragm

Type

- Check that "normal" is selected.

Power On Pos

- Check whether "+90 DEGREE" is selected.

Current Limitation

- Select "Current".

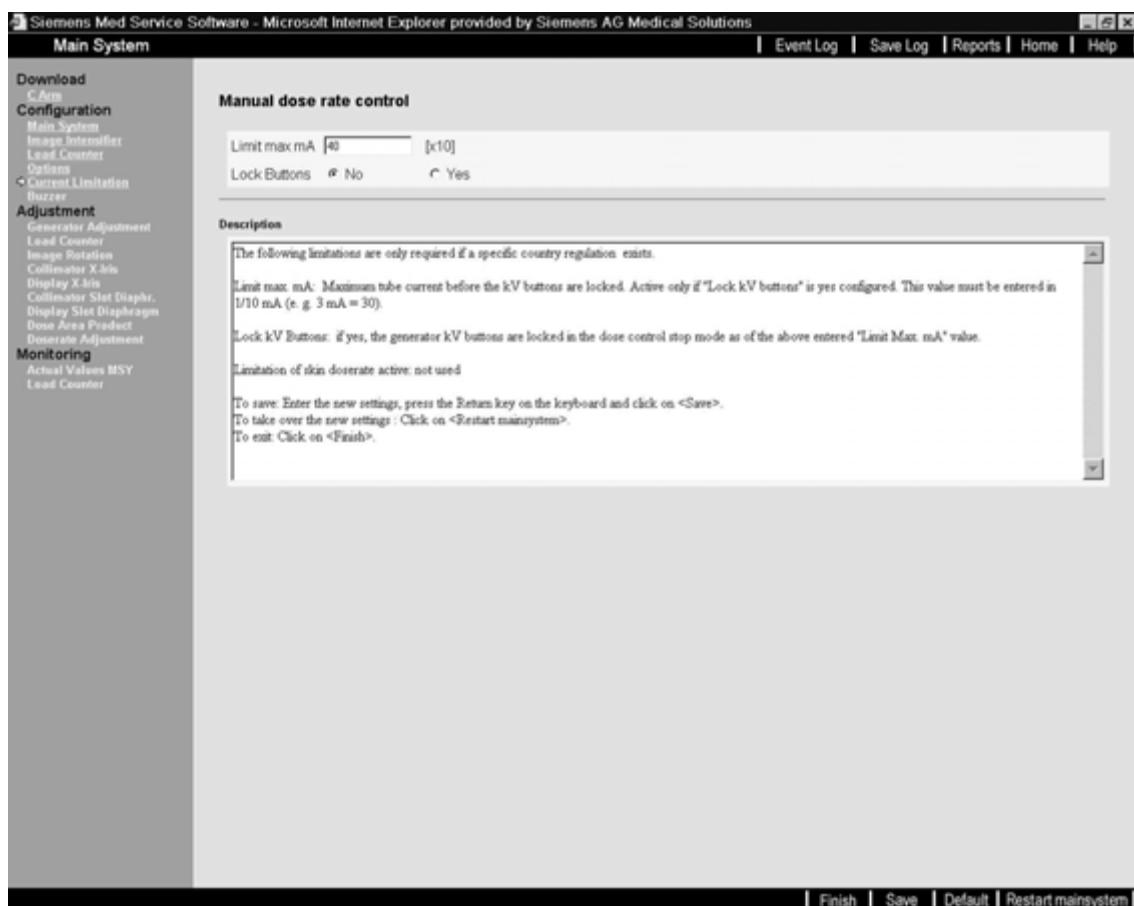


Fig. 74: MainSystem_Configuration_CurrentLimitation

NOTE

The "Tube Current Limitation" is required only for Denmark. The required setting is performed during startup.

Manual dose rate control

Max. mA limit

- Verify that "40" is displayed.

Lock kV buttons

- Check that "no" is selected.

Buzzer

- Select "Buzzer".

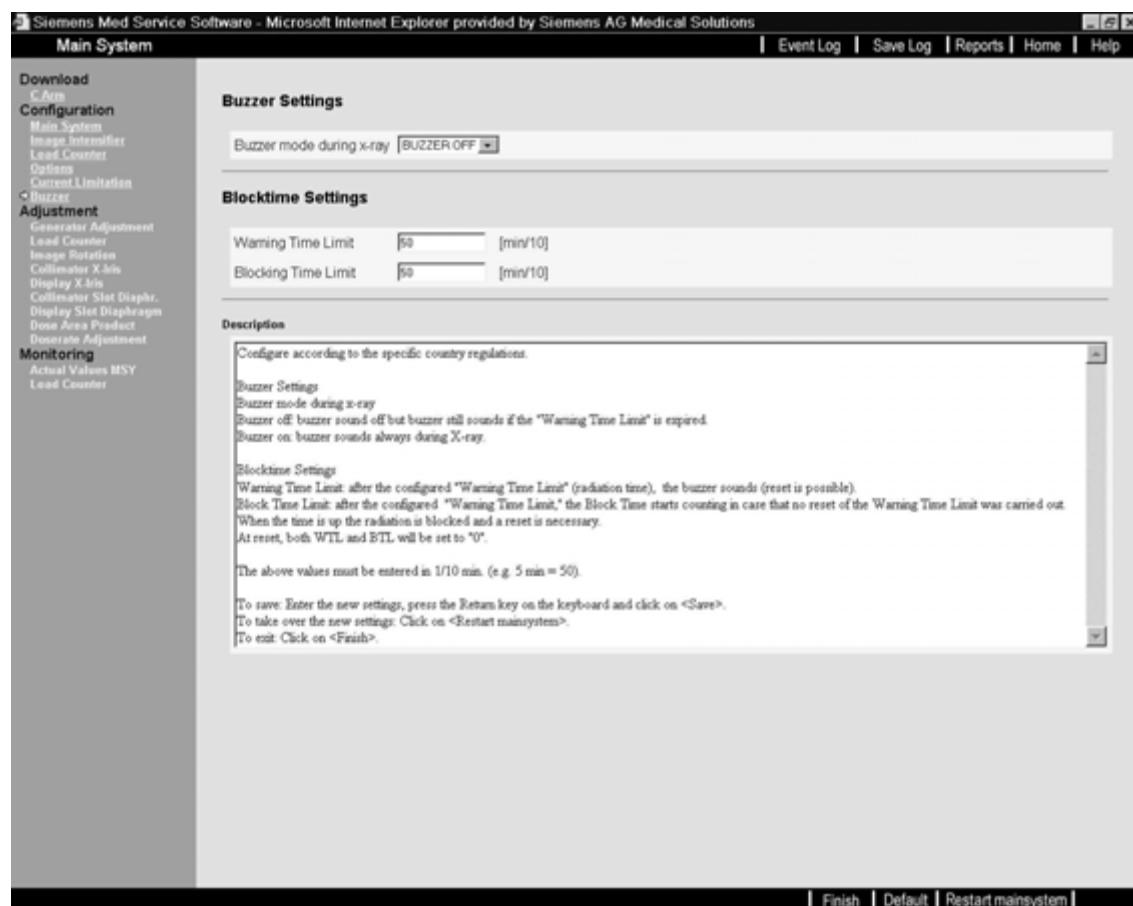


Fig. 75: MainSystem_Configuration_Buzzer

NOTE

The required setting is country-specific and is therefore made during start-up.

Adjustment

Generator Adjust.

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Load counter

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Image rotation

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Collimator, X-iris

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Display X-iris

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Collimator slot diaphr.

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Display slot diaphr.

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Diamentor

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Dose rate adjustment

This point is performed when working with the document "Adjustment SPR2-330.842.01.xx.xx".

Monitoring

MSY Actual Values

Actual Values MSY

- Select "Actual Values MSY"

The screenshot shows a web-based interface for monitoring system parameters. On the left, a navigation menu lists categories like Download, Configuration, Main System, Image Intensifier, Lead Counter, Options, Current Limitation, Buzzer, Adjustment, Generator Adjustment, Lead Counter, Image Rotation, Collimator X-Iris, Display X-Iris, Collimator Slat Diaphr., Display Slat Diaphragm, Dose Area Product, Dose Rate Adjustment, Monitoring, Actual Values MSY, and Lead Counter. The 'Actual Values MSY' link is highlighted. The main content area is titled 'Actual Values MSY' and contains a table with 14 rows, each listing a parameter name. Below the table is a 'Description' section with detailed explanations of the terms. At the bottom right of the content area are 'Finish' and 'Go' buttons.

Temp. Sensor [Celsius x10]	
Actual K-Faktor	
Actual Control Status	
Actual Control Curve	
Actual Dose rate	
TV-Iris Position [AD]	
TV-Iris Nominal Val	
X-Iris Position [AD]	
X-Iris Nominal Val	
Collimator Open Pos	
Collimator Rotation Pos	

Description

The current system status can be read out on this read-only monitoring page.

Temp. Sensor (Celsius x 10) = Single tank temperature in degrees Celsius
 Actual K-Factor = actual K-factor (noise reduction)
 Actual Control Status = actual control mode of the MSY (description see below)
 Actual Control Curve = curve from the exam set
 Actual Dose Rate = actual selected dose rate (LOW, MID, HIGH)
 TV Iris Position (AD) = actual TV iris position
 TV Iris Nominal Val = nominal TV iris position
 X-Iris Position (AD) = actual X iris position
 X-Iris Nominal Val = nominal X iris position
 Collimator Open Pos = actual collimator opening position
 Collimator Rotation Pos = actual collimator rotation position

Possibilities of the actual MSY control status:
 INACTIVE = no control mode is active (STOP selected) or two control modes are active

Fig. 76: MainSystem_Monitoring_ActualValuesMSY

No configurations can be made on this page.

Click "Go" to display to actual main system values.

Load Counter

Actual Values MSY

- Select "Load Counter".

The screenshot shows a web-based interface for the Siemens Med Service Software. The title bar reads "Siemens Med Service Software - Microsoft Internet Explorer provided by Siemens AG Medical Solutions". The main menu includes "Event Log", "Save Log", "Reports", "Home", and "Help". On the left, a navigation tree under "Main System" shows "Download", "C-Arm", "Configuration", "Main System", "Image Intensifier", "Lead Counter", "Options", "Current Limitation", "Buzzer", "Adjustment", "Generator Adjustment", "Load Counter", "Image Rotation", "Collimator X-Offs", "Display X-Offs", "Collimator Slet Diaphr.", "Display Slet Diaphragm", "Dose Area Product", "DoseRate Adjustment", "Monitoring", "Actual Values MSY", and "Lead Counter". The "Lead Counter" node is currently selected. The main content area is titled "Load Counter" and lists various monitoring parameters in a table:

Parameter	Description
Total Load Units	
Overload Counter	
Reset Counter	
Heat [Joule x10]	
Average Power [W]	
Temp. Sensor [Celsius]	
Mode1 Low-1	
Mode1 Low-2	
Mode1 Low-3	
Mode1 High-1	
Mode1 High-2	
Mode1 High-3	
Mode2 Low-1	
Mode2 Low-2	
Mode2 Low-3	
Mode2 High-1	
Mode2 High-2	
Mode2 High-3	
Drive	

Below the table is a "Description" section containing a detailed explanation of the load counter's status and its components. At the bottom right of the content area are "Finish" and "Go" buttons.

Fig. 77: MainSystem_Monitoring_LoadCounter

No configurations can be made on this page.

Click "Go" to display the current values of the load counter..

Service software

Open the service software

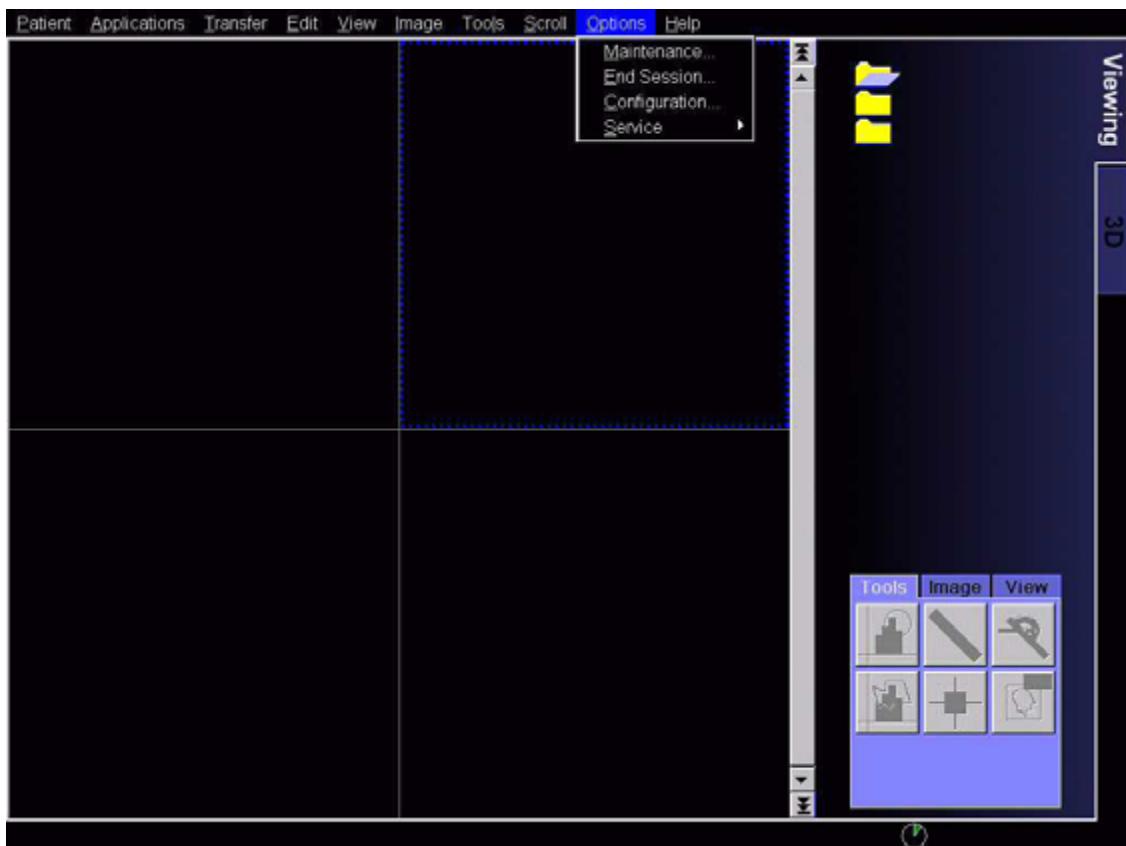


Fig. 78: C06_5_01

- Select "Service" under "Options".

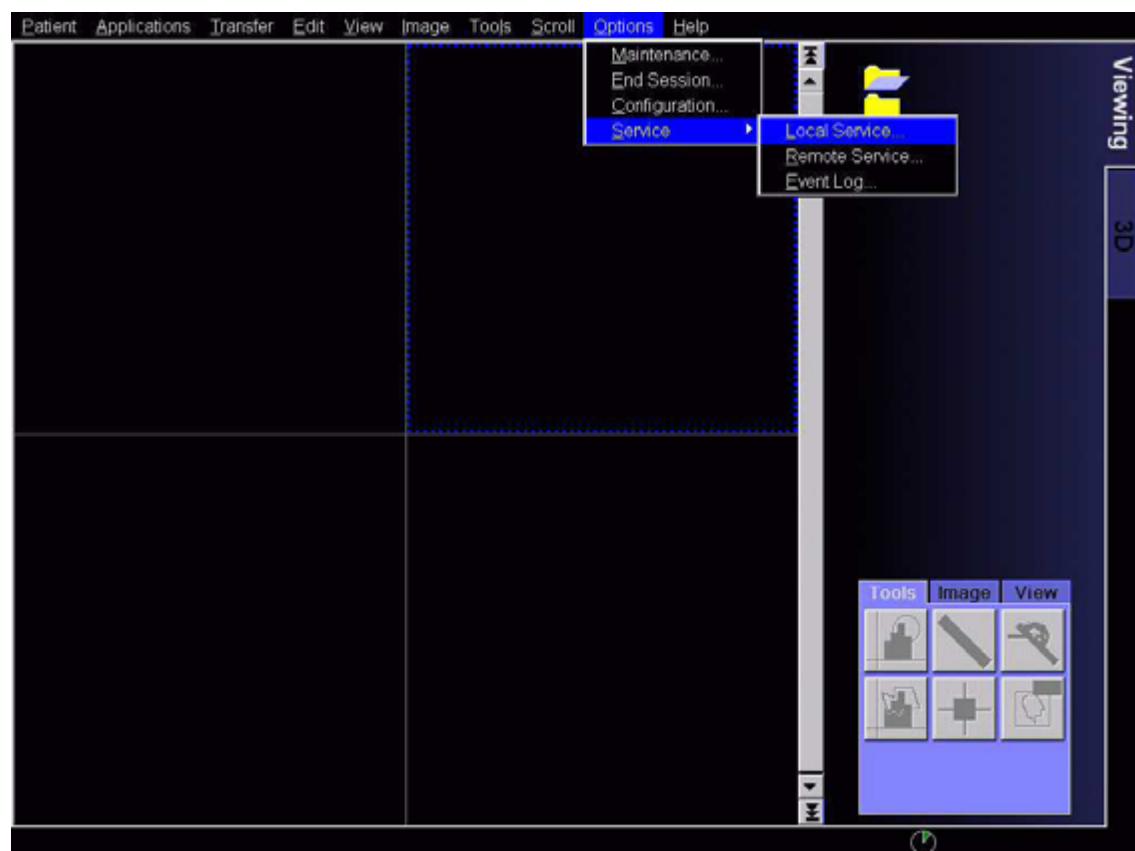


Fig. 79: C06_5_02

- Select "Local service"

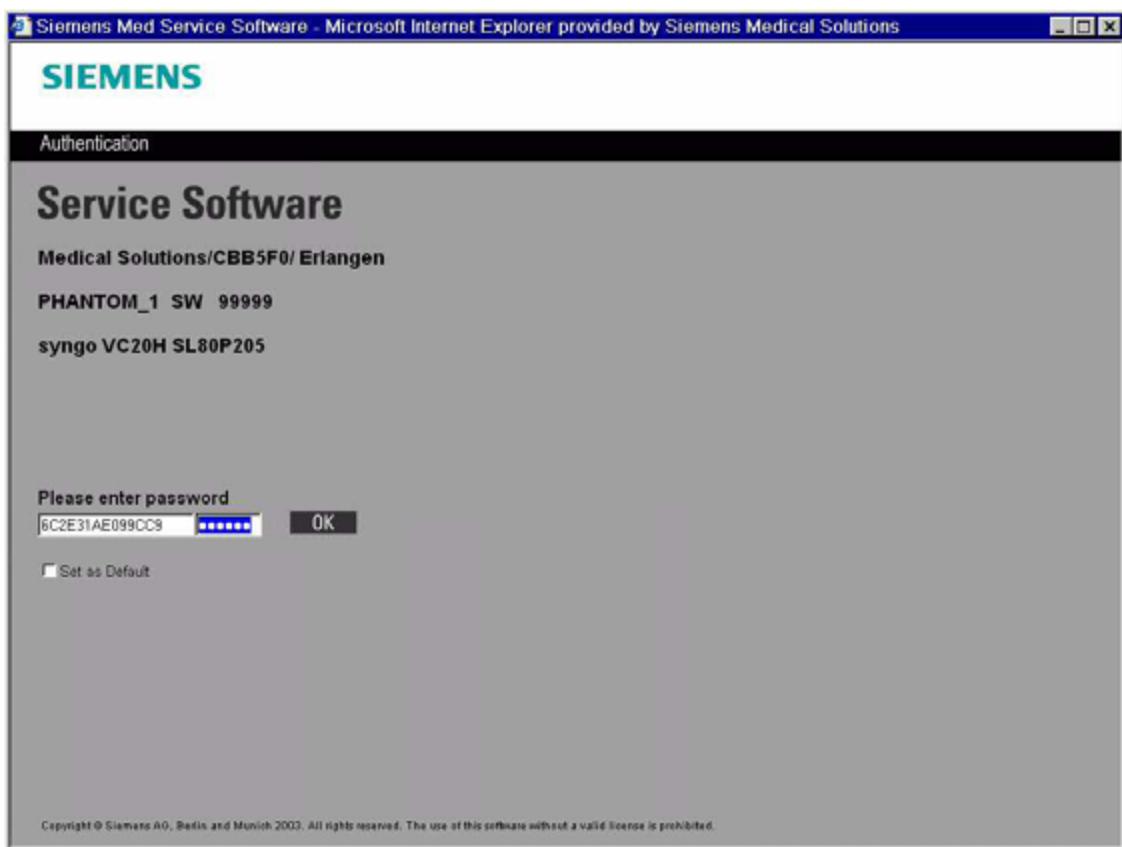


Fig. 80: C06_5_03

- Enter the service key under "Please enter password".
- Select "Set as default".
- Confirm with "OK".
⇒ The “Home menu” is displayed.



Fig. 81: Home Menu

Backup

NOTE

A backup must be created after software installation, software update or system adaptation.

Backup

- Select "Backup & Restore" in the "Service software home menu"
- Insert the backup CD into the CD-ROM drive.



Fig. 82: Backup & Restore >> Command

- Under "Command", select "Backup".

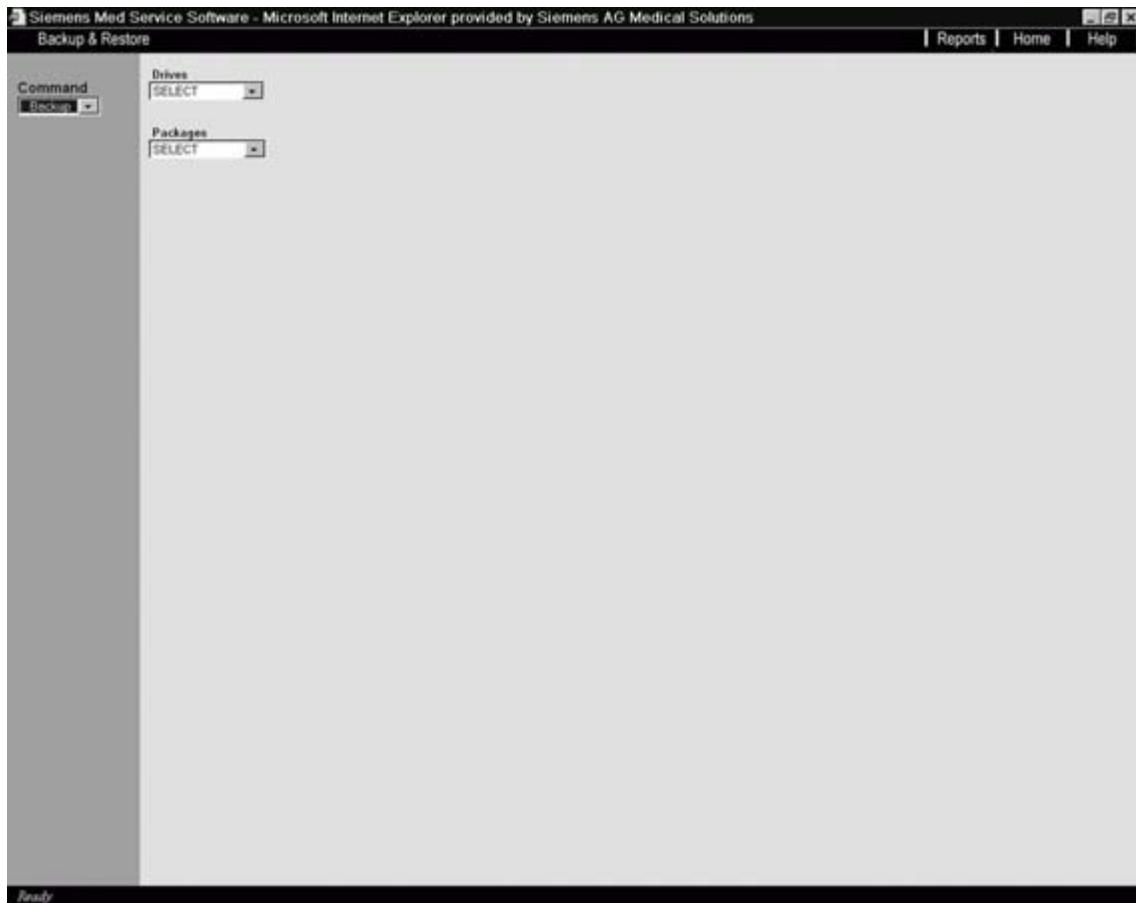


Fig. 83: *Backup & Restore >> Command >> Backup*

- Select the appropriate drive under “Drives”.
 - Save to CD-ROM (standard save).

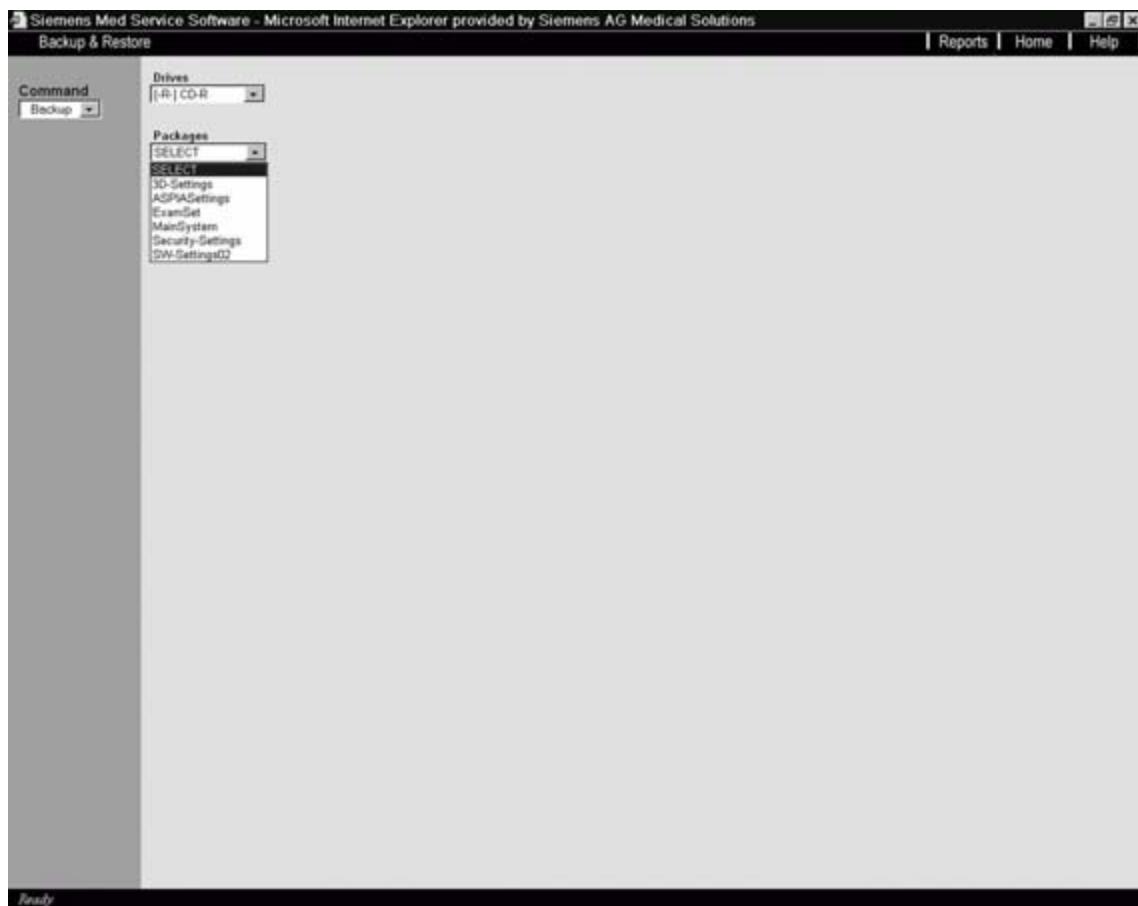


Fig. 84: *Backup & Restore >> Command >> Backup >> Packages*

SW settings02

- Select "SW-Settings02" under Packages.
- Click "Go".
 - ⇒ The backup is created.
- Wait until "Ready" is displayed in the footer.
 - ⇒ The CD ROM drive opens automatically.



Fig. 85: Backup & Restore >> Command >> Backup >> SW-Settings02

ASPIA settings

- Select “ASPIASettings” under Packages.
- Click "Go".
 - ⇒ The CD ROM drive closes automatically.
 - ⇒ The backup is created.
- Wait until "Ready" is displayed in the footer.
 - ⇒ The CD ROM drive opens automatically.

Exam set

- Select “ExamSet” under Packages.
- Click "Go".
 - ⇒ The CD ROM drive closes automatically.
 - ⇒ The backup is created.
- Wait until "Ready" is displayed in the footer.
 - ⇒ The CD ROM drive opens automatically.

Security settings for systems with HIPAA configuration

- Select “Security-Settings” under Packages.
- Click "Go".
 - ⇒ The CD ROM drive closes automatically.
 - ⇒ The backup is created.
- Wait until "Ready" is displayed in the footer.
 - ⇒ The CD ROM drive opens automatically.

Main system

- Select “MainSystem” under Packages.
- Click "Go".
 - ⇒ The CD ROM drive closes automatically.
 - ⇒ The backup is created.
- Wait until "Ready" is displayed in the footer.
 - ⇒ The CD ROM drive opens automatically.

Exiting backup

- Close the window via “Home”.
- Remove the backup CD-ROM.
- Store the CD-ROM with the system documents.

NOTE

It is not possible to back up the database (patient images)!

Save the patient images to the archive.

Saving to CD-ROM as a long-term archive is prohibited.

Backup of system data

NOTE

This backup enables viewing of all data saved in the individual configuration reports.

Burning log files to CD

- Insert a blank CD.
- Select "Event log".
- In the upper command line, click "Burn log files".
 - ⇒ This generates the log files.
 - ⇒ This saves all files located in the extract folder on CD-ROM.
- Remove the CD from the CD-ROM drive and label it.

Checklist

NOTE

If the system is connected to a network, the following checklist must be filled out and filed in the system binder.

Person responsible for network configuration at customer site

	Name:	
	Phone/fax:	
	E-mail:	

System network data

	Identification:		Enter under:
	Computer name		* Configuration/local host/TCP IP address
	IP address:		
	TCP/IP address		* Configuration/local host/TCP IP address
	Subnet mask		* Configuration/local host/TCP IP address
	Gateways		* Configuration/local host/TCP IP address
	General: Local AE title for:		
	HIS/RIS		* Configuration/DICOM/general
	Study transfer		* Configuration/DICOM/general
	Print		* Configuration/DICOM/General

	Comment:		

Network data for HIS/RIS network partner (only with HIS/RIS option)

	Available	Yes	No
	Device:	Version:	Manufacturer:
	Host properties:		
	Host name		* Configuration/DICOM/HIS RIS nodes
	TCP/IP address		* Configuration/DICOM/HIS RIS nodes
	General node properties		
	Logical name		* Configuration/DICOM/HIS RIS nodes
	Application entity		
	AE title		* Configuration/DICOM/HIS RIS nodes
	Port number		* Configuration/DICOM/HIS RIS nodes
	Comment:		

Network data for reporting console/archiving system

	Available	Yes	No
	Device:	Version:	Manufacturer:
	Host properties:		

	Host name			* Configuration/DICOM/Network nodes
	TCP/IP address			* Configuration/DICOM/Network nodes
	General node properties:			
	Logical name			* Configuration/DICOM/Network nodes
	Application entity:			
	AE title			* Configuration/DICOM/Network nodes
	Port number			* Configuration/DICOM/Network nodes
	Supported Dicom services:			
	Storage	Yes	No	* Configuration/DICOM/Network nodes
	Storage commitment	Yes	No	* Configuration/DICOM/Network nodes
		Node name:		* Configuration/DICOM/Network nodes
	Query	Yes	No	* Configuration/DICOM/Network nodes
	Retrieve	Yes	No	* Configuration/DICOM/Network nodes
	Comment:			

Network data for reporting console/archiving system

	Available	Yes	No
	Device:	Version:	Manufacturer:
	Host properties:		

	Host name		* Configuration/DICOM/Network nodes
	TCP/IP address		* Configuration/DICOM/Network nodes
	General node properties:		
	Logical name		* Configuration/DICOM/Network nodes
	Application entity:		
	AE title		* Configuration/DICOM/Network nodes
	Port number		* Configuration/DICOM/Network nodes
	Supported Dicom services:		
	Storage	Yes No	* Configuration/DICOM/Network nodes
	Storage commitment	Yes No	* Configuration/DICOM/Network nodes
		Node name:	* Configuration/DICOM/Network nodes
	Query	Yes No	* Configuration/DICOM/Network nodes
	Retrieve	Yes No	* Configuration/DICOM/Network nodes
	Comment:		

Additional guideline added under "Offline Devices." Text changed from "Display X-ray" to "Disable X-ray." Image for Operating Mode Roadmap added. Under "Image Intensifier," the words "single tank" changed to "I.I serial number."